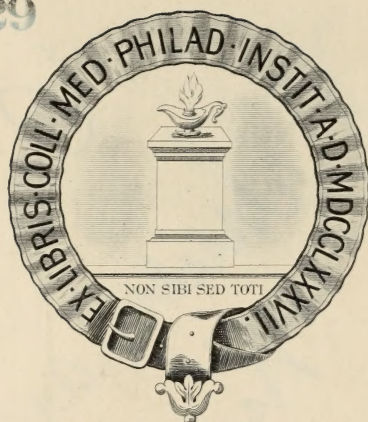


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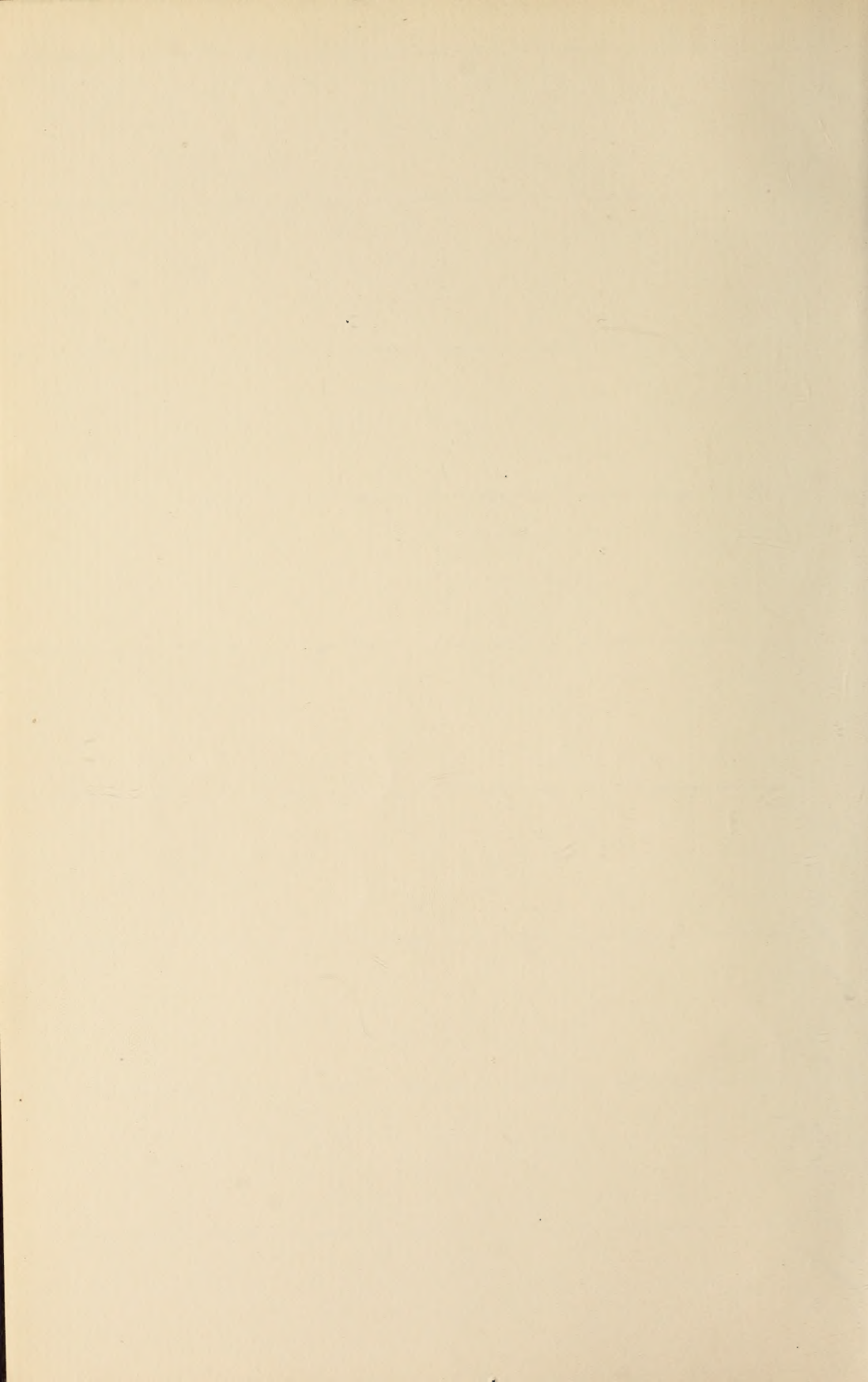
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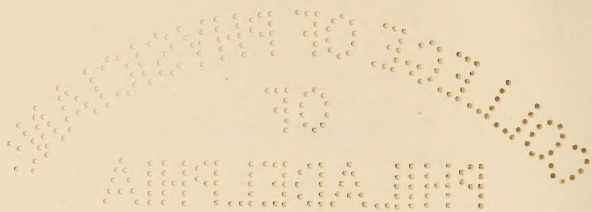
JANUARY TO DECEMBER,
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THE HAHNEMANNIAN MONTHLY.

JANUARY, 1906.

THE DIAGNOSIS OF DISEASES OF THE LIVER.

BY GEORGE F. LAIDLAW, M. D.,

PROFESSOR OF MEDICINE IN NEW YORK HOMOEOPATHIC MEDICAL COLLEGE AND HOSPITAL.

(Read before the Interstate Federation of Homeopathic Medical Societies of New York and Pennsylvania, October 26, 1905.)

WE will take first the two forms of cirrhosis, the ordinary atrophic or alcoholic cirrhosis and the hypertrophic or biliary form.

Atrophic Cirrhosis.—Of the atrophic cirrhosis or gin drinker's liver one feels that much could be done if the disease could be diagnosed early enough. Practically, the disease is never recognized until the appearance of ascites; and, by this time, the growth of fibrous tissue has advanced so far and the liver is so badly damaged that cure seems impossible and palliation our only resource.

In that early stage of cirrhotic liver before the appearance of ascites, there may be no symptoms. If present, the symptoms are common to so many diseases that they do not point specifically to the liver, as dyspepsia, with flatulent distension, eructations, diarrhœa, dingy skin and progressive weakness and emaciation.

In this early stage, palpation and percussion leave us in the lurch; for, the decrease in the size of liver may be so slight that we cannot be sure of recognizing it.

Errors are made in outlining the liver, even by the experienced hand and ear; for, with a tympanitic stomach lying be-

neath and a tympanitic colon slipping up over it, the lower border of the liver is elusive.

By the time that the shrinking of the liver has advanced far enough to be recognized, ascites is usually present to confirm the diagnosis.

The presence of ascites alone does not by any means indicate cirrhotic liver. A tubercular peritonitis in the young, an abdominal cancer in the old, or an ovarian tumor or cardiac dropsy at any age may simulate the general emaciation and distended abdomen of cirrhotic liver. It is a good rule never to make a positive diagnosis as to the cause of a dropsical abdomen until you have drawn off the fluid; for, a tightly-stretched abdominal wall prevents accurate location and palpation of the viscera. After tapping, the abdominal wall is relaxed and flabby and the recognition of the diseased condition is often surprisingly simple. Then the small, hard cirrhotic liver with rounded lower border is usually easily recognized.

In the present state of our knowledge, the treatment of cirrhotic liver is purely palliative. No authentic cure seems to have been made with medicine. The most radical procedure is the Talma operation of establishing new anastomoses between the liver and the diaphragm, and if the patient's strength is good, this operation is indicated. If this operation is not feasible, the best way to assist your remedies is to tap early and tap often. If the patient has any chance of recovery or prolonged life, it will be materially increased by relieving the heart, lungs and kidneys from the pressure of a distended abdomen.

Hypertrophic or Biliary Cirrhosis.—If you have a patient with what seems to be obstinate catarrhal jaundice, but who is much weaker and sicker than is usual with simple catarrhal jaundice, examine his liver and spleen. You may find his liver so large that its lower border extends below the umbilicus, and his spleen as far forward as the edge of the costal cartilages and plainly palpable. This is a case of hypertrophic or biliary cirrhosis of the liver. It is a peculiar disease, not very common, extending over many years. It differs from the ordinary alcoholic or small liver cirrhosis in that the newly-formed connective tissue does not shrink but the liver remains permanently enlarged. Ascites, which is so marked in alcoholic cirrhosis, is absent in the hypertrophic form. In hypertrophic cirrhosis the newly-formed connective tissue compresses the

bile ducts, causing jaundice, but leaves the branches of the portal vein free. In alcoholic or atrophic cirrhosis, the new connective tissue obstructs the branches of the portal vein causing ascites but seldom interferes much with the bile ducts. For this reason, jaundice without ascites is characteristic of hypertrophic cirrhosis, while ascites without jaundice is characteristic of hypertrophic cirrhosis, while ascites without jaundice is characteristic of the atrophic form.

In hypertrophic or biliary cirrhosis, the symptoms are chiefly those of the complicating jaundice, that is tormenting itching of the skin, headache, and digestive disturbances. About ten years ago, I cured a well-marked case of hypertrophic cirrhosis by the use of hot fomentations over the liver, faradic electricity and a combination of calcium chloride and Durand's old remedy, ether and turpentine. The patient was a young homœopathic physician who is now in active practice, and I must admit that he deserves as much credit for the cure as I; for, if it had not been for his own patient work and systematic treatment of himself, my advice would have been of little use to him.

Waxy or Amyloid Liver.—A waxy liver, you will rarely see and still more rarely diagnose. One usually mistakes it for chronic Bright's disease, for the patient will be very anæmic, dropsical, and have albumin in the urine. If with these symptoms, you can make out a marked enlargement of both liver and spleen, you can be reasonably sure of the presence of waxy disease. If there has been a prolonged period of suppuration, tuberculosis, syphilis, or malarial poisoning, your diagnosis is certain. The absence of jaundice distinguishes waxy disease from the large liver and spleen of hypertrophic cirrhosis. In all cases of enlarged liver with cachexia one should exclude leukæmia by counting the leucocytes of the blood. Waxy disease is a terminal degeneration and it is never cured.

Cancer.—Much more frequently than waxy liver, you will meet cancer of the liver. Here there should be no mistake in the diagnosis if the disease is well advanced, for the liver is large, hard and nodular, the peculiar wooden or stony hardness being altogether different from any other disease of the liver. When, with this large, hard liver, you have severe pain and cachexia, it would seem as if there were no excuse for mistaking it for anything else; but I have seen such livers mistaken for aortic aneurism and ovarian tumor, and even for belly-

ache. With cancer, there is often marked ascites and the fluid drawn is apt to be bloody. In fact, bloody ascitic fluid almost invariably indicates malignant disease somewhere in the abdomen. Sometimes the size of a cancerous liver cannot be determined until the ascitic fluid is drawn off. Then the enlargement and wooden hardness of the liver is plainly palpable.

Cancer of the liver may be internal and not on the surface. In this case you cannot feel it and, in the early stage, the enlargement of the liver may be slight. In such a case, it is possible that the diagnosis cannot be made. Cancer of the liver is nearly always secondary. If carefully searched for, the primary growth will usually be found, and most often in the organs tributary to the portal vein, as stomach, sigmoid or rectum; or those contiguous to the liver, as stomach or gall bladder.

Hydatid Cyst.—A large liver with good general health suggests hydatid cyst. If the enlargement of the liver is demonstrably cystic either by palpation or aspiration, the diagnosis is made more probable. Aspiration of any growth in or about the liver should not be done needlessly or carelessly but should be performed with all the aseptic precaution of an abdominal section. Microscopic examination of the aspirated fluid will always reveal the hooklets and bits of membrane that are characteristic of hydatids. If a hydatid cyst suppurates it runs the same course as any other abscess of the liver.

Passive Congestion.—We are all familiar with the intimate relation between heart and kidneys, but many of us have not yet appreciated the association of the heart and the liver. In all chronic heart disease, the right ventricle finally weakens and the free flow of blood from the venæ cavæ into the right auricle is obstructed. The liver, which empties such a large amount of blood into the inferior vena cava may be the first organ to feel the obstruction. A venous congestion of the liver ensues which, passing down the portal vein becomes a venous congestion of the gastro-intestinal mucous membrane with catarrhal gastritis or enteritis. The venous congestion of the liver causes a uniform enlargement, which may be enormous, and so it happens that, in chronic heart disease, an enlargement of the liver may be the first physical sign of failing compensation. Long before the doctor thinks of examining the liver, the patient is made aware of its distension and the associated catarrhal condition of the stomach and intestines by flatulent

distension, eructations of gas or fluid, bad taste, coated tongue, general discomfort in the epigastrium and hæmorrhoids.

These are the patients to whom you will give nux and hydrastis and pulsatilla and pepsin or pancreatin without relief. The lesion is a passive or venous congestion of the liver and gastro-intestinal mucous membrane caused by a failing heart, and it must be treated from the standpoint of the failing heart, just as you would treat the bronchial cough that appears under like circumstances. Just as digitalis will relieve such a cough of failing compensation after the failure of a dozen cough cures, so these dyspeptic symptoms will often disappear promptly under the use of a heart tonic, whether it be digitalis, strophanthus, cactus or another. This is a practical point of much value in treating the dyspepsia of the aged. All patients after the age of fifty years are apt to have a weakened heart wall even if no valvular lesion or enlargement can be detected. Whenever a patient over fifty years of age complains of these flatulent and other epigastric discomforts, I examine the liver, spleen and stomach, taking especial care to exclude cancer of the stomach; and then always place my stethoscope over the heart. If I hear, as I often do, a mitral regurgitant murmur, or an aortic systolic murmur indicating arteriosclerotic changes about the aortic valve, or find an enlarged area of dulness or an apex displaced downward or to the left, I conclude that I probably have to deal with one of these passive congestions. Even if I do not find a demonstrable heart lesion, I am very apt to regard it as a possible passive congestion. There is no surer or quicker way of deciding this point than by the administration of digitalis. Small doses will do the work. One-tenth of a drop of the tincture or five drops of the infusion after meals are usually sufficient, and if you are on the right track, you will see improvement within forty-eight hours. From the small dose that is effective and the resemblance of these symptoms to the toxic symptoms of digitalis, I believe that its action is often homœopathic in principle. In fact, I was led to use small doses of digitalis in these cases by observing their resemblance to the dyspeptic symptoms produced by overdoses of digitalis.

Active Congestion.—This is an entirely different condition though presenting similar symptoms. You will have patients of thirty years of age and upward complaining of bad taste in the mouth, coated tongue, eructations, headache, constipation

and hæmorrhoids. These patients are of two classes. There is the sleek, red-faced, well-fed, good liver, and there is the pale, sick-looking student or clerk. Though drawn from separate walks of life, you will find that these patients have three points in common. They are large feeders; their habits are sedentary and, on examination, as the patient stands stripped, you will see that the abdomen is fat and unduly prominent. With the patient lying on the back and the knees flexed, you can scarcely percuss or palpate the liver on account of the fat abdominal wall. If you succeed, you will find that the lower border of the liver extends below the free border of the ribs and that it is tender to pressure. If you pass a faradic current through the liver, you will find it very tender along both upper and lower borders, and perhaps over its entire surface. This is the abdominal plethora of the older writers, and it is probably as near as you will ever come to diagnosing a fatty liver. It is a congestion of the liver from the side of the portal vein, with over-fulness of the entire portal system. Here *digitalis* does no good, because it is not a matter of a failing heart, with backward pressure through the vena cava but an excessive flow of arterial blood to the entire digestive tract that, in its turn, is unloading its excess of blood on the liver. These are the patients who are continually taking purgatives because these medicines make them feel so much better. They are the patients who get great benefit from the cure at Carlsbad or other resorts where abstemious diet, active outdoor exercise and free purgation are carried out. In my opinion, if a patient would do the same thing at home, he would get just as much benefit. Daily or almost daily purgation is really good for many of these patients for they have too much blood in their portal circulation and this plethora is undoubtedly relieved by aloes, sulphur and the sodium sulphate or magnesian waters. The homœopathic remedy is very effective. Treatment of the liver and the entire abdomen by faradic electricity for fifteen minutes two or three times a week is directly curative. One must not confuse these cases of abdominal plethora and their prominent abdomens with the prominent abdomen of dilated stomach or gastroptosis. The distinction is made by giving the patient a level teaspoonful of tartaric acid dissolved in two ounces of water followed by an equal amount of bicarbonate of soda in water. By the resulting effervescence, the stomach will be distended and its outline plainly revealed by palpa-

tion and percussion. In case of doubt, the prompt relief that follows the application of an abdominal supporter in cases of prolapse or dilatation, will settle the diagnosis.

I have said that the condition of abdominal plethora will be as near as you will probably ever come to the diagnosis of fatty liver. The real fatty liver of the text-books occurs chiefly in tubercular phthisis. It is only a *post mortem* curiosity; for its symptoms during life are overshadowed by those of the lung disease.

Abscess.—Abscess of the liver is rare in this climate, but it is undoubtedly true that some of the cases that do occur here go undiagnosed to their graves. Like suppurative appendicitis, abscess of the liver is such a serious disease when left to itself and it is so amenable to surgical treatment that it is a pity not to give a patient the chance of operative removal of the pus before he dies of sepsis or rupture of the abscess into the abdominal cavity.

Suspect abscess of the liver in your case of supposed obstinate malarial fever or tuberculosis with afternoon rise of temperature, slight sweating and occasional chills, when the liver is swollen and tender to pressure. That patient is fortunate whose abscess is in a part of the liver where it hurts; for, the combination of intense pain in the liver, irregular swelling and remittent temperature is fairly conclusive of abscess. You must exclude the syphilitic liver, and the irregular fever of inflammation of the gall-bladder.

Having diagnosed abscess, do not expect that the pus will be absorbed or encapsulated. Pus anywhere in the body is not a medical but a surgical condition. Absorption of the pus of a formed abscess never occurs either spontaneously or under the influence of remedies. While your patient's lymphatics will not absorb pus, they will absorb plenty of toxins from the pus as any man in hospital practice can testify.

Syphilis.—A condition that is sometimes mistaken for abscess of the liver is syphilitic hepatitis. It occurs in patients who have had syphilis many years before and is characterized by a prolonged fever of remittent type, with or without chills and resembling typhoid or malarial fever, but with this difference; that there is a marked swelling of the liver, as in abscess. Such patients recover rapidly under mercury and iodide of potash; but the disease is apt to be prolonged and puzzling unless the correct treatment is adopted.

Another syphilitic disorder of the liver is syphilitic cirrhosis which differs from the ordinary alcoholic cirrhosis in its more prolonged course, extending over ten or fifteen years, the absence of ascites and the marked deformity of the liver. In ordinary alcoholic cirrhosis, the liver shrinks uniformly in all dimensions. In syphilitic cirrhosis, the shrinking is irregularly distributed making very curious deformities of the liver as seen in the *post mortem* room; or there may be gummata that resemble cancer nodules. The distinction from cancer is made by the history of syphilis, and also by the fact that the cancer liver is always enlarged, whereas in syphilitic cirrhosis, the liver is usually demonstrably small. In all cases of tumor or nodules of the liver, the possibility of syphilitic liver should be borne in mind, and sometimes it may be wise to use an energetic mercury and iodide of potash treatment to make sure that you are not dealing with syphilis.

In recent years, an attempt has been made to determine the functional efficiency of the liver as an aid to diagnosis. If we could examine the bile as we do the urine, the recognition of liver disease would be simplified; failing in this, we can determine the functional efficiency of the liver in a roundabout way. The liver is the chief organ that makes up the lower nitrogen compounds into urea for excretion by the kidneys. Normally, 85 per cent. of the nitrogen is excreted as urea. Any extensive disease of the liver tissue diminishes its urea forming power, so that the urea forms much less than 85 per cent. of the total urinary nitrogen.

Again, normal liver tissue stores up all sugar of the food in the form of glycogen. This same power seems to be possessed by other tissues for all sugars except fruit sugar or lævulose. Both experimented and clinical evidence indicates that the liver is the only organ that can convert and store up lævulose. Therefore, by giving moderate amounts of lævulose as food and watching for its appearance unchanged in the urine, we have a method of determining the functional efficiency of the liver, at least of its glycogenic function.

These tests are as yet under fire and have not been largely adopted in clinical work. As yet, we cannot depend on them sufficiently to state with certainty that a given liver is sick or well. Their chief use has been in cases where there was doubt as to which of several organs was diseased, and to confirm other doubtful signs of involvement of the liver.

APPENDICITIS AND THE LEUCOCYTE COUNT.

BY JOSEPH H. FOBES, M. D., NEW YORK.

(Read before New York State Homœopathic Medical Society, 1905. Fall meeting.
Syracuse, N. Y.)

Members of the New York State Homœopathic Medical Society, Ladies and Gentlemen:

As is well known to you all, the term leucocytosis, signifies a count of more than 8,000 white blood cells to the cubic millimeter.

This subject may be considered under two heads:

I. The leucocyte count in the differential diagnosis of appendicitis.

II. The leucocyte count in the progress of the disease and as a guide to operation.

I. *Differential Diagnosis.*—What are the diseases which a leucocytosis differentiates from appendicitis?

According to Cabot, typhoid fever and appendicitis may be confused. Typhoid fever almost invariably presents not only no leucocytosis but a diminished number of white blood cells, even a leucopenia.

A case in question presented a number of typhoid symptoms which I found later to be due partly to morphine. On removing him to the hospital a blood count was immediately obtained which showed 13,500 leucocytes to the cubic millimeter. The case was diagnosed as diffuse septic peritonitis with a lowered vitality due probably to the rupture of an appendicular abscess. This was found true on operation and the patient recovered, where no blood count and possible delay would have proved fatal.

Ordinary colic, malaria, ovarian neuralgia, floating kidney, gall stone colic and renal colic without inflammation, and impacted feces also show no leucocytosis.

Cabot mentions a case where on account of the low leucocyte count the surgeon against his usual practice in appendicitis gave a high soap-suds enema and cured the supposed appendicitis.

For differential diagnosis with any inflammatory disorder the clinical symptoms should take precedence over the blood count. This is especially so in pelvic disease found in conjunction with mild appendical irritation. One case of sup-

posed severe appendicitis showing a blood count of 48,500 proved to be one of pus tube with an infection of the appendix probably along the appendiculo ovarian ligament through its lymphatics.

II. *Progress of the Disease and When to Operate.*—Like the Indian, "The only good appendix is a dead one," but there is a proper and fitting time for its removal.

As Edmund L. Gros, of Paris, recently said:

"On one point all surgeons seem to agree, namely, that if a case of acute appendicitis is seen within a few hours of the beginning of an attack, an immediate operation has every chance of success and offers little more danger than an interval operation. If, however, as is too often the case, the physician is called within twelve, twenty-four, or even thirty-six hours after the first symptoms have appeared, it is then unquestionable that an operation should be decided upon only after most careful study of the case.

"This is the opinion to-day of such men as Roux, of Lausanne; Routier, Cazin, Jalaguier, etc., of Paris; Kurschmann, Wassermann, Sonnenberg, Kuhn, in Germany."

He regards the leucocyte count as the most precious sign at a time like this.

Under the second caption of this paper, let me cite two cases:

Case I.—Mr. B., aged 27, G., born in U. S., clerk. I saw him on the third day of the disease. Previous history shows one attack about a year ago. The leucocytes were 11,200. The count steadily decreased until on the ninth day it was 8,707. On the thirteenth day operation showed a few drops of seropus and an indolent ulceration nearly to the peritoneal coat. But the patient was in very good shape and made a good recovery.

Case II.—Miss M. Aet. 27, S., U. S., nurse. Previous history shows one attack a little over a year ago. I saw her on the first day of the present attack. On the second day the count showed 10,240, seventeen hours later it was 20,365. Operation showed three fecal concretions and pus in unruptured appendix. Recovery good.

These cases show the necessity of more than one count. The first one was on the border-line. Cabot says that no case of catarrhal appendicitis ever shows a leucocytosis. If the count had gone above 12,000 he would have been operated

upon immediately, as 12,000 has been the danger line at the Flower Hospital. In the second case pus formation was clearly shown and immediate operation indicated. The blood count was the most important factor in both of these cases, but the other clinical symptoms should always be correlated with it.

Dr. MacDuffie, House Physician of the Flower Hospital, who has taken great interest in this work together with his able assistants, has furnished me with blood counts in several other cases operated upon by Doctors Helmuth, Stewart and Crump and myself. They are as follows:

1. 8,145—5th day. No operation. Recovered.
2. 12,000—3rd day. Pus in unruptured appendix.
3. 12,200—5th day. Pus in unruptured appendix.
4. 12,800—2nd day. Operation third day. Pus in badly inflamed appendix.
5. 12,860—7th day. Retro-cecal abscess walled off.
6. 28,218—3rd day. Perforated appendix, much pus.
7. 13,500—4th day. Septic diffuse peritonitis, very weak condition.
8. 33,777—8th day. Diffuse septic peritonitis, after saline infusion.

Every count above 12,000 showed pus in varying amounts and the necessity for immediate operation.

There is a class of cases of which I have no example, where count is very low, even leucopenia. Cabot notes only four out of a large number. In these cases the organism is overpowered by severe septicemia. Operation here only hastens the end, while careful nursing and the use of the appropriate remedy, usually arsenic, lachesis or baptisia, sometimes antistreptococcic serum, and the use of the Fowler elevated head and chest position may help nature to combat the virulent infection. It is easy to differentiate these cases from the ordinary catarrhal appendicitis, with no leucocytosis.

Conclusions.—First as regards differential diagnosis. Cabot regards the leucocyte count as of positive value. Deaver, on the other hand, almost entirely discounts it, claiming that bedside diagnosis is the thing on which to rely. I prefer to use every aid I can, and if necessary can bring the microscope to the bedside, which is entirely unnecessary, however.

Second, as an indication of the progress of the disease and as a guide to operation the leucocyte count is most useful.

The experience this summer has brought forth the following conclusions:

1. The leucocyte count is chiefly valuable as an indication of the progress of the disease rather than in initial diagnosis.

2. The count should be taken frequently, even hourly in doubtful cases, and a chart should be kept like a temperature record.

3. A count below 12,000 indicates—

(a) Mild catarrhal appendicitis with little or no pus. (Some authors, however, claim that pus may be present with no leucocytosis. None of the hospital cases showed this condition), or

(b) Severe infection of a fulminating character where resistance is below par. These cases should *not* be operated.

4. A count above 12,000 indicates pus. Operate.

5. An increasing count indicates a spreading infection. Operate.

6. A rapidly decreasing count indicates resolution, or an annihilation of the leucocytes. Do not operate.

7. A high stationary count indicates a walled off abscess. Operate.

8. A low stationary count indicates a mild attack. Do not operate.

While these cases have been few in number, still they are enough for some statistical value, and a straw shows which way the wind blows.

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STROPHANTHUS IN SERIOUS CARDIAC DISEASE.—The indefatigable Dr. Jousset relates in *L'Art Medicale*, a case of mitral insufficiency, with dilatation, oedema of the legs, dyspnœa and scanty urine, in which ten drops of tincture of Strophanthus per day, rapidly relieved the condition. He was led to the remedy by the pronounced irregularity of the pulse and by the great weakness of the heart's action. The dyspnœa diminished and ceased, the urine became freer, and the patient was dismissed in three weeks.—*Recorder*.

KNOWLEDGE OF THE "ELECTIVE AFFINITY" OF DRUG ESSENTIAL TO THE KNOWLEDGE OF THE TOTALITY OF SYMPTOMS.

BY GEORGE ROYAL, M. D., DES MOINES, IOWA.

(Read before the Mo. Valley Homœop. Med. Asso.)

ONE of the most difficult things to teach; one of the most difficult things to determine at the bedside is the relative importance of the various symptoms of a group. Assuming (and if he be a homœopathist we have the right to assume) that the physician be guided in the selection of his remedy by paragraphs 18 and 153 of the organon, he often finds it more difficult to decide which are the characteristic than which are the pathognomonic symptoms in a given case.

We all know how difficult, in some cases, it is to determine which is the similimum or even the most similar remedy of the class to which our memory or our repertory has directed our attention. In other words, we all know how difficult it is to differentiate between two or three remedies which have produced the same or nearly the same symptoms, upon the healthy. It is my purpose to show you to-day, that a thorough knowledge of the "elective affinity" or "tissue proclivity" of drugs is one of the greatest if not the greatest aid in making these necessary differentiations.

Before taking up the illustrations which I shall use and the deductions which I shall draw from them let us get together in our definition of "elective affinity." I will use this term instead of "tissue proclivity" which our ultra-scientific men claim to be more comprehensive, because I know you are more familiar with it. Hahnemann learned from observing the action of drugs upon his provers, that some of them, whether introduced into the system through the skin, the mucous membrane or directly into the blood, always affected certain tissue with a constancy equal to that with which the magnet finds the pole. To this property of the drug he applied the term "elective affinity." Hahnemann, to a certain degree, and his followers of the present day, to a still greater degree, learned from observing the effect of drugs upon provers that of several drugs which affected the same tissue or organ, some produced similar effects differing only in degree while others produced effects differing both in kind and de-

gree. I would therefore define knowledge of "elective affinity" of drugs as that knowledge which enables one to know what tissues or organs will be affected by certain drugs and what the action will be upon those tissues or organs.

The idea that such knowledge could and should be utilized in the selection of the remedy was ridiculed by the old school until they began the study of serum therapy or anti-toxines. I mean the idea that one sudorific should be used to relieve the dryness of the scalp, another to relieve the dryness of the skin of the feet, and a third of the trunk. But the experiments of the men of the old school taught them that an anti-toxine which was found helpful in diphtheria was of no help in tetanus, etc. This led to the wonderful discovery that a certain serum would affect a certain tissue or organ, but would have no effect whatever on other tissue or organs. It being a new discovery and having nothing whatever to do with Hahnemann's "elective affinity" this property of drugs was called "tissue proclivity" by the old school; showing another example of graft which they are always working on us.

To illustrate my point let me cite a few cases.

Case 1.—My own patient; male, age 38, family history good, had just been dismissed after five weeks of typhoid fever, was recalled because the patient "had been out and overexerted himself and had also overloaded the stomach." I found him unconscious following about six hours of drowsiness. The stupor was profound. He would occasionally utter a sharp cry. The pupils did not respond to light. There was jerking of the various muscles, bladder distended, breathing was stertorous, the bowels had been constipated during the five weeks which I had attended him for typhoid. I used the catheter, securing over a pint of urine, gave opium 6x. Showed improvement after eight hours, but went through another siege of typhoid of four weeks' duration, making a good recovery.

Case 2.—Seen in consultation, female, 10 years of age, blonde, family history good. Patient had been dismissed five days previous, after a mild run of scarlet fever. The doctor had been recalled twenty-four hours before I saw the patient, because the child was not voided urine. The usual old school treatment had been given for twenty-four hours. The patient had grown more and more drowsy, till she was unconscious, stertorous breathing, she would occasionally utter a

sharp cry, pupils did not respond to light. Marked jerking of various muscles, bladder empty. Apis 3x five drops every half hour for six doses, then every hour for four doses, when two ounces of urine were passed, and the patient began to improve, but suffered nearly three weeks from acute nephritis, with albuminuria.

Case 3.—Female, age 18. Father and mother both neurotic; father uses alcohol to excess; mother had had three attacks of acute mania, but none within ten years. Patient had returned one evening from the park; thrown herself upon her bed with a cry which brought her mother to her bedside. The doctor reached her half an hour later and found her unconscious. The mother stated that she had been unusually drowsy all day, had gone to the park to get some fresh air, to see if it would not wake her up. Pupils did not respond. Respiration slow, labored and stertorous. A sharp cry now and then. The doctor had made no impression after twenty-four hours and I was called. The only additional symptom I could elicit was that the bladder was enormously distended (two pints were drawn by catheter) and the fact that the patient was menstruating, and that she was always drowsy although suffering from colic at that time. Nux muschata 30x cleared up this attack in twenty-four hours, but had to be continued for six months before a cure was completed. By a cure I mean the drowsy and colicky condition at the menstrual period.

Case 4.—A young woman, aged 18, tall, light complexion naturally, but now sallow. Came to the office to get relief from a sharp pain in the right side under the shoulder blade. The pain had continued for about eighteen hours. The bowels were constipated, the stools light colored. The tongue was coated yellowish white. I prescribed chelidonium 3x every two hours, giving the first dose at 3 P. M.

About two o'clock the next morning I was called because the patient had not been able to sleep. In fact "the pain under the shoulder blade" had steadily increased in severity. An examination revealed a case of herpes zoster with the blue serum in the vesicles. Ranunculus bulb. for the remainder of the case.

If you carefully examine the symptoms of the first three cases you will note that "drowsiness," "stupor," "unconsciousness," "insensibility of pupils to light," "a sharp cry,"

"jerking of muscles," and "no urine voided" are found in all of them. I presume that at least a half dozen remedies, for each case, have come to your mind as I have recited the symptoms. Did the three cases all require the same remedy? If so, how would you select it out of the half dozen? If a different one for each case, how would you differentiate between the six? In each case I made the selection by the help of my knowledge of the "elective affinity" of drugs. Opium was given because it is a deep acting remedy, having an "elective affinity" for the nervous and circulatory systems, which systems were affected by the typhoid poison. Apis has an "elective affinity" for the urinary organs causing a condition simulating uræmic coma.

In the third case we needed a remedy which had an "elective affinity" for the nervous system, as the coma was hysterical, *nux musch.* was the remedy.

The fourth case needs no comment. The location and character of the pain in this case certainly called for the *chelidonium*, and it was only after the herpetic eruption appeared that we knew positively what tissues were involved. The previous personal history in the first and second cases and the family history in the third were the illuminating factors which threw their light upon the relative importance of the symptoms; but our knowledge of the "elective affinity" of these drugs determined our choice. I do not want you to infer from what I have said that this knowledge of the "elective affinity" of drugs will take the place of the knowledge of the "totality of symptoms" of drugs. Knowledge of the former can not supplant that of the latter. It should only be used to *supplement* or *perfect* our knowledge of the "totality of symptoms."

Those who write and talk so flippantly and falsely about "The passing of the pure Symptomatological Prescriber" can find no comfort in the view I hold. For the older I grow, the more experience I acquire the more firmly am I convinced that the most successful way to prescribe is upon the totality of symptoms. In order to receive assistance from the knowledge of the "elective affinity" of drugs in our search for the "totality of symptoms" we must have a thorough knowledge of both physical and clinical diagnosis.

RICKETS.

BY E. FORNIAS, M. D., PHILADELPHIA, PA.

WHILE many authorities are right in asserting that many points connected with the etiology of rickets are as yet imperfectly understood, the anatomical changes are fairly well known. That it is a malady of nutrition is universally accepted and that it bears specially on the osseous system we all know; and we can but concentrate our attention, first on the divers incurvations assumed by the epiphysis of the long bones (tibia, femur, etc.); second, on the epiphysial tumefaction of the same bones (the radius in particular); third, on the thickening of the long bones; fourth, on the persistency of the anterior fontanels; and fifth, on the dental evolution; the molecular decay of the teeth, and the early falling out of the same.

A clinical fact well authenticated, also, is that nine out of ten rachitics are bottle fed; that in the breast-fed it follows early weaning, as a rule.

Is it the result of decalcification as some have claimed, or, is the defective ossification due to imperfect digestion, absorption, and assimilation, as others contend? Neither an insufficiency of lime, nor its excessive elimination can be evoked, for just the contrary seems to be the case. Two recent theories have been proposed to explain the pathogenesis of rickets—(1) the infectious theory sustained by Mircoli; and (2) the auto-intoxication theory. Both have for support the experiments of Charrin and Gley, who produced rachitism in small animals by the injection of toxins to the mother.

As to the osseous lesions, I limit myself to state that they are more marked at those points where the work of ossification is most active, and that the healing occurs by reabsorption of the eburneous tissue and its replacement by periostial and epiphysial bone. Thickening is usually first seen in the ribs, forming that row of knobs down the sides of the chest, called the rosary. The process of softening is due to the absorption of the mineral constituents of the bone. The bone bends in the direction determined by the line of chief pressure, which practically depends on the position habitually assumed by the child.

Rickets develops on a special soil, which is that of the *chronic-dyspeptic* with dilatation of the stomach. The appetite is voracious and tends to keep up the dyspepsia. After

feeding the child with milk, alimentary vomiting takes place. Constipation is habitual, but occasionally there are diarrhœic, fetid stools. The abdomen becomes enormous, frog-like. In ordinary cases it is flabby, unless there is tympanitis. On examination one perceives a *gastric rippling* in the neighborhood of the umbilicus (of no value when there is diarrhœa, as it may be due to gases or colic). The liver is slightly enlarged. The spleen is notably dull on percussion. There are eczematous eruptions, and the child is almost always covered with sweat. The flesh is flabby, but the child is not always thin, he may even be obese. The face is pale; there is hypoglobulia.

Now, in the midst of this clinical picture, the onset of the osseous trouble is insidious. The symptomatic elements varying with age. Towards six or eight months old we have to deal, as a rule, with craniotabes,—the olympian forehead of the French. Before one year, the eruption of the teeth is delayed, the palatine arch is cavernous. After a year, the eruption of the teeth is irregular; there is a rachitic rosary, in fact, a rickety child, who does not walk. If the manifestations of rickets are delayed, the child who had commenced to walk stops walking. This symptom, we must admit, is providential—why? Because, if walking had continued for some time, the incurvations would have appeared. Besides the knots can be confirmed, but the chaplet may be wanting.

As to the course of the disease, I may say that the chronic gastro-enteritis many end in a special *cachexia*. Ordinarily a cure is obtained but only after some time, and still the limbs may remain under the influence of the pathological process, for I have noticed incurvation at that time (early-genu valgum).

Of serious import in *rickets* are the *complications*, which may carry off the patients under the ravages of an *extreme anæmia*. This may be accompanied sometimes by *megalosplenía*, and can terminate in *pseudo-leucemia*, which is characterized by leucocytosis. *Infantile scurvy*, considered by some as distinct from ordinary scurvy, and according to others only a manifestation of rickets—an *acute hemorrhagic rickets*—is sporadic and affects infants of the upper classes. It is an association rather than a complication. In fact, there is often a scorbutic element in cases of rickets and if the child survives the acuter symptoms, there is a tendency to spontaneous recovery. On the other hand, Robert Hutchison thinks that to call that nutritional disease "*scurvy rickets*" is unfortunate,

since it is now quite well recognized that scurvy in infants has nothing to do with rickets at all, but that the co-existence of rickets in many of the cases is a mere accident and due to the fact that the kind of diet which is apt to produce scurvy is apt also to produce rickets.

Of extreme gravity to a rachitic child is *broncho-pneumonia*, especially when secondary to measles or whooping cough. Sometimes the child dies from convulsions, of which the most dangerous are the *spasms of the glottis*. *Tuberculosis of the bones*, regional or general, is the cause of many deaths. Even when the lesions are healed, the child may be later affected with what may be called the *sequelæ of rickets* (*genu-valgum* of adolescence, *tarsalgia*, *scoliosis*). The girls remained exposed to a future *dystocia*, if the pelvis has been affected. Due to arrested or delayed development the rachitics are often undersized. Nevertheless the largest numbers of cases of rickets are slight, and consequently of easy recovery, but otherwise the *prognosis* should be reserved.

To track this disease and follow its evolution is not always an easy matter. When the progress of rickets is slow, we may think of a *congenital luxation* of the hips, which is recognized by the absence of rachitic deformities, and by the progressive march towards luxation. The deformity can be mistaken with Pott's disease, but in this there are pains, a more complete loss of power and abscess formation. Moreover, if you hold the child up by the armpits, if the projection is due to laxity of the ligaments it will straighten out, whereas if it is due to tuberculous disease it will persist.

Hereditary syphilis may exhibit certain dystrophic stigmata, which should be distinguished from those of rickets. The syphilitic tibia is not only bent forward, but its thickness is increased. Dental deformities occur in both diseases, but the latchet-like teeth are characteristic of syphilis, while those of rickets are corkscrew in shape (*unicuspid state*), decay early and come late. The *olympian forehead* may belong to both.

There should be no difficulty in distinguishing a rickety from a hydrocephalic head; one is long and square, as if developed in a box, the other globular. "In *rickets* the forehead goes up more or less vertically in front and at the sides, whereas in *hydrocephalus* it overhangs the eyes and bulges out above the temporal regions; the top of the rachitic head tends to be flat, in *hydrocephalus* it is convex and spherical." (Hutchison.)

In both maladies the closure of the fontenals is retarded, but in *hydrocephalus* we have the ocular troubles to clear up the case. If a child with a *large abdomen* is brought to us for examination we must at once recognize the element which is at work, rickets or tuberculous, for in both, children suffer from a large abdomen. Of course, all children have prominent abdomens, due, more or less, to their large livers and small pelves, but in rickets, especially, this contingency is more accentuated. Fatty infiltration is held as the cause of an exaggerated hepatic enlargement; due to the osseous changes there is an atrophic diminution of the pelvic space, with collapse of the walls, thus offering limited quarters to the descending viscera. Moreover, the flabbiness of the abdominal walls allows easy distention by gases derived from the gastro-enteric catarrh, which always attends rickets.

In excluding diseases with which *rickets* bears some resemblance, we should always remember the *visceral changes*, which are of even greater importance than the osseous, and consist chiefly of catarrhs affecting the lungs, stomach, and intestines, and a tendency to fibroid degeneration of the internal organs, particularly the spleen and as Hutchison so well asserts, "that, there are children in whom rickets is not very marked, but who tend to have constant attacks of *bronchitis* or *diarrhœa*, and in them the rickety element is apt to be overlooked." Bear also in mind that a rickety child, though he cannot walk, is still able to use his limbs. In the *rickety* the trouble is merely an inability to walk, whereas in *paralysis* there is inability to move a particular group of muscles in any way at all. When a child of three years of age has not yet passed the "walking milestone," says Hutchison, you may take it that he is suffering from one of three conditions: either he has *rickets*, or he has *mental deficiency*, or he is the subject of *paralysis*. And again, a child may be brought to you, who is mentally deficient, but who suffers from rickets as well, when your prognosis must necessarily be partially reserved. In cases of rickets where there is great tenderness of the bones, the signs of scurvy should be sought for.

Rickets usually undergoes a natural cure by the end of the second or the commencement of the third year, so let us be moderate as to claims of cure. During the progress of the disease the patient usually emaciates and becomes anæmic, and this *anæmia*, as said above, becomes the cause of much solici-

tude and care. The muscular wasting and enfeeblement are very pronounced, and are often well marked at a time when all other signs of rickets have passed off.

If we accept the authorized dictum, that the rickety process is not one of *decalsification*, but of inability to appropriate the mineral salts necessary for the repair and development of the bony frame, it becomes evident that our first efforts should be directed towards the amelioration of the digestive and eliminative functions, which are constantly disturbed in this disease of dystrophia and denutrition; and in doing so, we should not construe as unfavorable the dissolution of the tribasic calcareous phosphates, but rather as an amelioration of the rickets, since this elimination by the urine denotes the absorption of the phosphates, which the state of the diseased bones has not allowed to appropriate as in the normal state.

The *treatment of rickets* comprises, in fact, three fundamental indications; (1) To relieve the lesions and gastro-intestinal troubles; (2) to improve digestion, absorption and assimilation; (3) to supply the bones with the phosphate of lime they need and are lacking in this disease. We can aid greatly the recuperative process by our well chosen remedies, but the capital point in the treatment is the diet, which should consist of liquids, principally on account of the toothless mouths or bad teeth we have to contend with. It goes without saying, however, that no liquid food can take the place of milk, especially maternal milk, but even cow's milk well selected will do well, for cow's milk, by the way, contains far more lime salts than human milk does, because milk from this source is designed to build up the massive bones of the calf. The diet that tends to produce rickets, on the other hand according to certain men, is that characterized by an excess of carbohydrates and a deficiency in proteids and fat, hence by diminishing the amount of starch and increasing both fat and proteids the problem is solved.

My rule has been, before one year of age to return to a milk diet if this has been dropped, and if the child is very young to prescribe the breast. When this is not possible the task becomes naturally arduous, unless you have put the stomach and intestines into a healthy condition, and the child can take plenty of cream, but under all circumstances try to increase the amount of milk. If you have to resort to artificial foods, select a food, which is dextrinized, but we should remember that

they are often deficient in fat, and its continued use is apt to make things worse. The risk of producing scurvy is increased by using other patent foods. After *weaning*, which should be delayed as much as possible, foods prepared with milk, soups, starchy purées and eggs, may be recommended, but never meats. The mastication of meat is usually incomplete in the infant, and its small percentage of phosphates renders it more detrimental than useful. Eggs, on the contrary, are beneficial; the yolk especially contains phosphorus, fat, and organic compounds of iron, in addition to proteid, all necessary for the development of the system. Rest in bed and attention to hygienic surroundings are imperative.

Certain deformities may demand surgical aid, but as a rule this is not needed. Sea baths, aeration and massage are valuable adjuncts. The sea air for children under two years, and the sea baths for those above that age. It is surprising how they stimulate nutrition.

Since the time of Jahr we are directed to two groups of remedies as the most frequently indicated in rickets. Some have been used with success, others are hardly considered to-day in the treatment of this disease. Still others have been added to the list in later years by men claiming a thorough knowledge of homœopathic Materia Medica. I shall give them here, and refer afterward to those which have occasionally proved beneficial at my hands.

The *first group* consists of the following drugs: Asaf., bell., calc. c., lycop., merc., puls., silic., staph., and sulph. The *second* includes: Mezer., nit. ac., nux jugl., petrol., phosph., phos. ac., and rhus. tox. The *third*: Ars., ars. jod., asafœt., arg. nit., baryt., baryt jod., brom., carb. v., carbol. ac., flour. ac., graph., kali jod., kali phos., hecla lava, hepar., iodium., mur. ac., nat. sulph., oleum jec., opium, oxalic ac., ruta., secale., sulph. ac., and therid. (Lilienthal gives angust, bruceae, pinies. s., symph.)

For incurvation of the spine (Kyphosis): Bell., calc. c., puls., sulph. For incurvation of the cylindrical bones and tumefaction of the joints: Asa., calc. c., silic and sulph.

For rickety head; with late closure of the fontenals: Calc. c., silic., sulph. (puls). For the thickening process; Asaf., aurum., dulc., lycop., merc., mezer., phosph., sepia., silic., sulph.

For the softening process: Asaf., calc. c., merc., silic., sulph. 01 hepar, lycop., mezer., nit. ac., phos., puls., ruta., sep., staphis.

To promote the reparative process: Asaf., calc. c., lyc., nit. ac., ruta., silic., sulph., and of late: *Symphytum officinale*.

For the epiphysial tumefaction of the long bones. Asaf., calc. c., flour. ac., lycop., merc., phos. ac., puls., silc., sulph.; and sometimes we may have to resort to: Aurum, clemat., daph., guai., nitr. ac., phosph., rhus tox., ruta., and stilling.

The *complications*; or *exacerbations* of certain elements of the trouble, may demand the study of special drugs.

For the persistent *anæmia*: Arsenic, china., iodi., nux. v., sulph.; if leucemia: Acet. acid, iod. and nat. sulph; and if the spleen is markedly affected: Ars. china, coni.; if any cutaneous eruptions appear: Graph., staphys., sulph. For *delayed dentition*, consult: Calc. c., calc. phos., ferrum., kreos., merc., phos., sulph. (*Dolichos*).

For molecular decay of teeth: Kreos., staphis.

For scorbutic manifestations: Carbo. v., china., kreos., phos., erytrox., sulph. ac.

For nervous irritability: Acon., arsenic, cham., cina., coffea., jodi., kali. brom., kreosot., melilotus.

For gastric difficulties: Aescul., arsen., baryta., cham., calc. c., cina., ipec., lycop., merc., mag. c., nux. v., podo., puls., rheum, and sulphur.

For intestinal affection: (*Diarrhæa*): Ant-crud., arg. nit., arnica, arsenic, borax, calc. c., calc. phos., carbo. v., coni., graph., hepar., lycop., merc. phos., phos. ac., podo., puls., psorin., rheum., secale., staphis., sulph.; especially in the bottle-fed: Calc. c., baryt. c., nat. phos.; alternating with constipation: Ant. c., lycop., phos., sulph.; (*Constipation*): Alum., bryon., calc. c., calc. phos., caust., graph., hepar., lycop., magn. m., nitr. ac., nux. v., opium, sepia, silica., sulph., verat. alb.

For *broncho-pulmonary troubles*, we should consult: Amm. carb., ant. tart., calc. c., conium., hepar., iodum, ipec., kali. bich., lycop., phosph., silic., sulph.

As to myself I have been satisfied with the employment of calc. carb. and silica., phosph. and sulphur to correct the disorders of ossification. The two first meet better than any other remedies I know of the general state of malnutrition and the progressive osseous changes attending it. Sulphur, I think, is the best auxiliary for the process of softening, so, as I consider phosphorus the remedy to attenuate the thickening of the long bones. I have not found *symphytum officinalis* the remedy others claim, to hasten the reparative process. As inter-

current remedies I have used asafoetid., lycopodium, staphysagria, and mezereum, but I have not seen any marked effects follow their administration. I have had no occasion to lend any care to *broncho-pulmonary localization*, but the stomach and intestines have given me much trouble. Nothing, however, has been, for me, the source of so much anxiety as the regulation of the diet, and in some cases the persistency of the *anæmia*. I am convinced that to accomplish the first and attend with care to the second is the real serious task of the treatment. Otherwise, we see the little patient's progress towards recovery after a great deal of anxiety and suffering.

I always study baryta when I see in children imperfect development, especially if the abdomen is very much enlarged, the glands are affected, and above all if there is a progressive emaciation from malnutrition. I have not seen theridion reach the root of the evil and destroy the cause, as Lilienthal claims. For the *anæmia* I have given arsenic and phosphorus with good results; and in two severe cases with leucocytosis, acetic acid did excellent work. For the *obstinate constipation* I have used opium when the inertia seemed complete. Next alumina, if the lack of action was not so marked, and silica when the expulsive power was so weakened that the stools slip back. Both phosphorus and graphites are remedies worth considering for *constipation*, under the conditions prevailing in rickets. I have also a good word for æsculus and arsenic in vomiting, and for secale, staphysagria and carbo. veg. in diarrhœa. Psorinum has disappointed me. I could not dispense with cod liver oil. A warm sea-salt bath prepared at home is a measure I shall never neglect.

RECURRENT PNEUMONIA.—*Apropos* of a report of Dr. Le Gendre about *recurrent pneumonia*, Dr. Griffon has just given out an interesting observation of a case ended in death, with post-mortem verification. It refers to a case of which Drs. Guinon and Burean had already reported the commencement of the observation, namely: Very extended right pneumonia, with collapsus. Purulent, consecutive, pneumococcic pleurisy. Empyema with costal resection. Subcutaneous, multiple, pneumococcic abscess, following caffen injections. Rapid recovery. This patient was sent to Vincennes; took ill again, enter the Hotel Dieu, about one month after his first release. He contracted again the same form of pneumonia, of the same side. Caffen injections given against collapse, were followed by a pneumococcic abscess and he died on the 13th day.—*L'Art Medical*.

E. FORNIAS, M. D.

THE CAUSES AND TREATMENT OF CATARACT.

BY F. PARK LEWIS, M. D., BUFFALO, N. Y.

(Read by invitation before the Interstate Federation of Homœopathic Medical Societies of New York and Pennsylvania at Scranton, Pa., October 26, 1905.)

AN old and renowned ophthalmologist recently said that all people who live long enough and who do not lose their sight in some other way, acquire cataracts. Very much as if he had said—that all people who do not lose their hair ultimately become gray. Gray hair, however, is not invariably an evidence of advanced age although it may indicate premature senility nor is the presence of cataract always a cause of blindness in the aged—for while an examination of the lenses of old people may show the presence of opaque striæ or other opacities these may not sufficiently interfere with the central transparency of the lens to markedly impair the sight.

It is often with depression, with apprehension, with dread, that one who is no longer young receives the verdict of the physician that in the lenses of the eyes degenerative changes have begun which must slowly but inevitably progress through an indefinite length of time—it may be six months—it may be two years until all of the beauties of the world, the faces of family and friends have been shut out, when business upon which the welfare of those nearest and dearest may depend must be sacrificed and there must follow that frightful period of waiting for blindness, before surgery can intervene and by skillfully removing the obstructing lens restore the sight again. It must not be forgotten, too, that when the surgeon has done his best the primal conditions are never quite the same. We have exchanged what was an elastic adjustable living structure which had at one time an accommodative range—extending from a half a foot to infinity for a fixed artificial lens system which must be changed to meet different focal requirements.

There is reason, therefore, in the terror inspired in the mind of a patient by the diagnosis of cataract with the corollary that modern medicine can do nothing to make clear the obstructed lens nor to stay the progress of the degenerative changes.

While most of our accepted authorities resignedly admit that the onset of a cataract is a signal for masterly inactivity until the lens shall have ceased to be a living structure—in other words, have become “ripe” some of our ablest ophthalmologists

have recognized this as the propitious moment to inquire why this local degenerative change is taking place and whether measures may not be instituted to correct the condition on which it depends and stay its progress.

Dr. Dransart whom de Wecker calls an experienced confrere and whom he quotes, says: "I am very positive that it is possible to prevent the formation of a cataract in a great many cases. In fact, I believe that in many cases the cataract formation depends on a state of malnutrition, especially characterized by the imperfect elimination of urea. I have actually seen this a great many times. Most of the individuals suffering from cataract are rheumatics with an imperfect nutrition." Dr. Dransart concludes: "With a good general hygiene, combined with antiarthritic treatment, and a perfect hygiene of the eye by means of proper glasses, we may succeed in almost half of the cases in preventing a cataract."

Commenting on this de Wecker continues: * "Undoubtedly most cases of cataract are formed in arthritics with arterio-sclerosis, but it is going very far to say that we can prevent the formation of almost one-half of the cataracts. Nobody can deny the progress made in the treatment of arthritis, and, more especially, the perfection we have arrived at in the correction of errors of refraction, but I do not know that even in those countries which are best supplied with prominent physicians and oculists the number of cataracts has decidedly diminished."

"In spite of this, it is useful to more and more draw the attention of patients threatened with cataract to the analysis of the urine, especially for urea, the cholerides and, above all, for sugar. It may very well be that an arthritic with arterio-sclerosis suffers from an intermittent diabetes and presents visual affections which show themselves as a change in the refraction and slight defects in transparency in the lens which may be effectively modified by an appropriate treatment. I am convinced that the repeated analysis of the urine is the best guide in the prevention and arrest of the formation of a cataract, on account of the indications for a rational treatment of the arthritic with arterio-sclerosis which is furnished by these analyses."

"Here we must remember the observations which were made in the watering places intended for diabetics. The observations

*See *Annales d'Oculistique*, March, 1905, translated by Alt. in *American Journal of Ophthalmology*, July 1, 1905.

of Seegen and Gerhardt at Karlsbad have scarcely been credited. They found that vision improved *pari passu* with the diminution of the glycosuria, but they did not substantiate their observations by ophthalmoscopic examinations and an accurate determination of the visual acuity. This objection can, however, not be urged against the observation reported by Koenig, which concerned a patient who having gone through a cure at Vichy, had recovered her vision and 'the absolute integrity of her crystalline lenses.' "

Much more hopeful and indeed scientific is this than the uncompromising pronouncement of Professor Fuchs.* "That every sort of medicinal treatment is inefficient against cataract." "A cure of cataract is secured only by operative means."

It has been, therefore, to advertising quacks—who readily promise anything and to charlatan remedies for the absorption of cataract that intelligent people have been driven failing to receive encouragement or help from those on whom they might properly depend. The purpose then of this paper is to raise the question whether the blindness of cataract is the inevitable accompaniment of advancing senility, whether there may not be other and possibly controllable conditions causing lens opacities and whether it is not our duty to seek for these in every case that is not so far advanced as to make surgery imperative. If, indeed, it were true that the gray lines which we discover scattered through the lens are evidences simply of the oncoming of dissolution—it would still be possible, as Stockton has pointed out in his magnificent oration delivered at the last meeting of the American Medical Association on the "Alleviation of Old Age" to so better the metabolism by physiological methods that every structure would be more fully vitalized and the evil day pushed farther in the future. If, still further, the gray lens like the arcus senilis or gray hair is visible evidence of the retrograde metamorphosis through which all of the tissues are passing before final destruction there is still a hopeful and optimistic ring in the assurances of Metchnikoff, that the head is white because the pigment has been consumed by bacilli which themselves succumb to the phagocytes developed by renewed vital energy and there is every reason to believe that other degenerative changes may be met and their progress arrested by generally bettering the physical tone.

*Text Book of Ophthalmology.

But atrophy of the lens fibres is not the beginning of cataract. De Wecker has shown "that in the very beginning there is simply a separation of the lens fibres with an unequal distribution of the nutritive fluid between the separated fibres. This displacement, due to the disassociation of the constituent parts of the lens, is sufficient to produce very pronounced opacities and to occasion quite a degree of obstruction of vision, but it is not unreasonable to admit that, without such lesion, and without destruction of the constituting elements of the lens, it might be possible in some measure to put things to right again and thus to cure a beginning cataract, or at least to arrest the further progress of opacification."

If, on the other hand, there are local reasons, within or connected with the eye itself which impair the nutrition of the lens fibres, and permit them to atrophy, these should be discovered and corrected, in order that the degenerative changes may be interrupted. That both exist I think we shall see.

While it may be true that cataract is frequently a disease of senility it must not be forgotten that senility is not always synonymous with old age. In a case under my own observation and in which I successfully removed the lens surgically in a man under fifty, there was every evidence of very old tissue. He had long had arcus senilis with high arterial tension. He shortly afterward developed a subclavian aneurism from which he ultimately died. It would seem reasonable to assume in this case that essential vascular changes must have long preceded the gross ones and that could right general measures have been instituted the structural changes might have been postponed.

To enable us to have a clear understanding of the relation of the lens to other tissues its embryological development must be considered. It will be remembered that the lens results from the invagination of a circular portion of the ectoderm which ultimately becomes completely cut off and is connected by the transparent zonule to the suspensory ligament. This is attached to the tissues of the choroid at its junction with the ciliary body. It is therefore related genetically to the cornea, the hair, the skin and the mucous membrane.

Many of our older physicians used to teach that there were reciprocal relationships between the inner and outer coverings of the body and when the similarity of structure is considered it is evident that this is true, for the one merges so imperceptibly into the other at the openings of the body, that there is no exact line of division between them.

An eczema is practically a dermal catarrh and the same underlying conditions that give rise to the one will produce the other. When an opportunity was presented to me several years ago to demonstrate this, I very gladly seized it.

A child of three and one-half years who came under my observation presented the most complete case of eczema that I have ever seen. The eyes and mouth were the only visible openings in what was practically one enveloping scab. The body and limbs were almost equally covered, scarcely an inch of skin being anywhere visible. At two years of age zinc ointments had been used, clearing the skin quite satisfactorily but convulsions so promptly followed that the treatment had to be discontinued. The skin immediately became eczematous again and the child grew well and strong. Other local measures were again attempted with the same result so that when the case came under my notice this repulsive condition had been allowed to flourish without treatment. It was so evident that some molecular disturbance existed involving the cell nutrition that although I do not accept general cases in my practice I could not decline the gratuitous treatment of this one, and I had no hesitation in assuring the parents that it was perfectly curable without danger to the child. The condition was one calling for sulphur. At the end of three months in which this one remedy was administered, the face became wholly clean. At the end of six there were only a few patches left on the body. Then the curious interrelationship of structures manifested. The child developed an asthma which was controlled by arsenicum. To-day except for an occasional patch which sometimes appears on the face, the child is well.

For many years I have noticed that certain gastric disturbances manifested by a coated tongue and a loss of appetite sometimes by involvement of the secondary digestive tract, in sluggish starch digestion, with bloating, etc., are associated with rapidly developing cataract in elderly people. It is quite possible that the reason for this is, that the vital processes are interrupted at their fountain head and the lens, without any direct vascular supply but the enveloping fluids, being indirectly nourished, is an early sufferer. It may be that tissues having like embryological structures are alike affected. In those, however, who are old either in years or in arteries, the necessity of an early correction of such essential defects cannot be overestimated.

The first recorded recognition I have of this was in the case of a maiden lady at that time fifty two years of age referred to me by my dear friend, that splendid physician, before whose talents we all bow, Dr. Asa S. Couch, of Fredonia.

At that time she had developing senile opacities in each lens and has been assured by a most competent ophthalmologist that in all probability the cataracts would be ripe and ready for operation the following year. I found that she had widely marked focal differences; striæ extended completely around the margin and somewhat toward the center of each lens. She was suffering also from dyspepsia. She was given suitable glasses and referred back to Dr. Couch for remedial treatment and when several months later her eyes were again examined they were so comfortable that she passed from my observation for seven years. In September 14, 1888, I found that her vision in the right eye was 12-200 and in the left 15-20.* The hyperopia was much greater in the left than in the right. For a year past the eyes had been weak and had felt strained. Her refraction was corrected and she was given lycopodium. Four months later when she reported all of the discomfort had disappeared.

R. V. equals 15-100

L. V. equals 9-10.

The clouding in the right remained very general. Since then she has seen me at intervals of perhaps six months. In the fall of the present year, 1905, twenty-four years after her first visit, this venerable woman now seventy-six years old, shows still opacities through both lenses but vision under correction glasses which have been many times accurately changed is—

R. equals 20-70

L. equals 20-40

which is quite as good as is usual at past three score and ten. She reads easily and comfortably by artificial light and has every reason to expect the continued use of her eyes as long as she lives. (A test made on November 5, 1905, shows in the right eye almost normal vision some letters of 20-20 being

*Normal vision is represented by the fraction 20-20, meaning that letters of a certain size are read at 20 feet. 12-200 means that letters that should have been seen at 200 feet, if that test could be made, were seen at only 12 feet.

read. The left is 20-40 some evidences of cataract still remain although central vision is so good.)

Another, a recent case, further demonstrates the value of treatment in senile cataract.

Mr. S., age 65, a brazier, of Jamestown, N. Y., consulted me on September, 1904, with the following history: He had been gradually losing his sight for twelve years until for some months he had been obliged to give up his work owing to the increasing loss of sight. Without glasses his tests were,

R. Eye equals 5-200

L. Eye equals 10-200.

Refractive test showed hyperopic astigmatism which on being corrected raised the vision in each eye to 20-70. With glasses for reading, correcting presbyopia, he was able to see,

R. Eye equals Sn. No. 8

L. Eye equals Sn. No. 10.

(Equivalent to very large print.) He was suffering from impaired digestion. His eyes began to fail him at least a dozen years ago. In both eyes pupils were of normal size with opacities extending through the center and nasal sides of both lenses. There was a general grayness throughout each lens. The eye grounds were normal as far as it could be discovered, the opaque lens making an ophthalmoscopic examination difficult. His refraction was corrected and he was given internally nux vomica and sulphur. He had been wearing previous to this, glasses which were prescribed by an ophthalmologist but which at the time of his visit to me were not correct. On October 11, 1904, his vision in each eye was 6-8 better in the right. January 24, 1905, my notes show that he could make out a few of the letters with both eyes on the line representing 7-8 vision. July 18, 1905, the refraction was found changed, the glasses were modified, vision in the

Right equals Sn. No. 1

Left equals Sn. No. 2.

With difficulty.

Has been able for the past six months to resume his habitual work and finds little difficulty in using his eyes in reading and writing. November 28, 1905, further modification of the

glasses was made showing refractive changes with increased improvement,

R. Eye equals 20-20

L. Eye equals 20-30

With each eye and in good light reads Sn. No. 1.

Opacities are still seen in the lens but the intervening spaces are much clearer and vision is quite comfortable. There is no reason to look for further degenerative changes. He has no difficulty in continuing his work which requires fairly good sight and his general condition is greatly improved. The remedies have been most of the time those originally given with occasionally lycopodium.

Cases of this kind could be multiplied as they are numerous on my records.

I have referred to the importance of refractive correction. I have seen almost every inflammatory diseased condition of the tissues around and about the eyes produced by eye strain and relieved by its correction. Blepharitis, conjunctivitis, chalazia, keratitis, intra-ocular hemorrhages are frequently the result of the effort on the part of the ciliary muscle with its readily engorged processes to adjust for focal and muscular errors. The case which I will report, and to which I have referred in another paper, is I think, however, unique as an illustration of nutritive disturbances produced in this way and its bearing is important in this connection because of the fact to which I have already alluded—the like embryological origin of the lens and the hair.

GRAY HAIR PRODUCED BY EYE STRAIN.

The patient, a young nurse with dark brown hair, was referred to me by Dr. A. W. Hurd, Superintendent of the Buffalo State Hospital in whose private family she was employed. She had binocular vision with excessive congenital shortening of the left inferior rectus. She was curiously marked with a white strand nearly an inch wide extending from the forehead through the center of her chestnut brown hair. After the relief of the eye strain by glasses and operative measures, to her surprise and mine, the white strand of hair gradually began to resume its natural color and after three months it was impossible to distinguish where this had been.

This leads to many interesting surmises. Are the sympa-

thetic trophic nerves so correlated to those governing vision that other atrophies may follow a persistent straining of sight? It would seem so. There is every reason to believe that the ciliary muscle acts segmentally; that in the endeavor to correct an astigmatism there is a band like meridional action which if continued long enough must impede the lymph flow in its substance and thereby affect the nutrition.

The importance of relieving refractive strain is especially great, when the lens tissues feel the inelasticity that comes after middle life, and it is from the fortieth to the fiftieth year that the greatest damage comes from uncorrected ametropia. Later in life sight is sacrificed and the effort is lessened as the struggle is greater than the ciliary muscle can overcome and consequent damage less likely to follow.

With the need of correction of undue strain is also the necessity of some regular visual effort. The muscles grow stiff and the lymph flow sluggish. This may be overcome by regular daily visual exercise.

The following brief summary of a case may illustrate my meaning:

A man of seventy I recently found to have vision but 20-200. I gave him a card on which were words in letters half an inch long. He could decipher them with great difficulty at ordinary reading distance. By persistent effort for five minutes he could see the letters very clearly and vision for distance had then become 20-100. He continued this exercise for a few minutes daily endeavoring at each attempt to see letters just a little smaller. This he actually succeeded in doing until in a month, distant vision had improved in the better eye to 20-30 and in the poorer.

Another method which I have found of value is in changing the intra-ocular circulation through the influence of light. In my dark room, my light is almost extinguished and covered when the pupil dilates. It is gradually turned on again and the pupil contracts. This regular alternation of contraction and dilatation is kept up for dozen or twenty times, when I find frequently that the exercise has somewhat bettered the vision. The same is true concerning gentle circular massage which is of value as an auxiliary measure in re-establishing the lymph flow when impeded.

To summarize briefly then:

The oncoming of senile cataract is by no means so serious

a menace to sight nor so refractory to treatment as we have been taught to believe.

It may be dependent upon constitutional conditions which should be recognized and controlled.

It may be dependent upon functional digestive disturbances which are responsive to proper treatment.

It may be due to uncorrected refractive errors or unbalanced eye muscles—and in the elderly as in the young the necessity of a right correction is of first importance.

It may be due to a sluggish lymph flow common in old age, when suitable ocular exercise may with advantage be employed.

It may be due to diabetes or some kidney lesion when treatment directed to these conditions must be considered.

It may be due to atheromatous arteries and an indication for constitutional consideration.

But in any event the individual study of the case will in almost every instance demonstrate that relationships exist outside of as well as within the eye and the treatment to be successful, as it often may be, must be broadly comprehensive of the totality of the conditions having to do with that especial case.

RESUSCITATION OF THE NEW-BORN.

BY JAMES WALSH, M. D., CORTLAND, N. Y.

ON July 15th was called to attend Mrs. K. in confinement. Age 24, primipara. Presentation, left sacro-anterior. Uterine contractions during second stage were feeble and short. After delivery of trunk, pains ceased and some difficulty was experienced in delivering the after-coming head; pulsation was present in the cord just previous to delivery of the head. Child was apparently dead when born. Resuscitation was attempted for five minutes before ligation of the cord, but child did not breathe. After quickly tying the cord, I personally worked for thirty minutes in the attempt to establish respiration. I used all the usual methods with deliberation, viz.: alternate dipping in hot and cold water, artificial respiration by position, mouth to mouth inflation and flagellation of the chest. The child did not breathe, but gave an expira-

tory gasp three or four times which was attributed to the inflated air left in the lung. The child was passed over to an attendant with instructions to keep up the flagellation. I advised the family that the child was dead and could not be resuscitated. They could not reconcile themselves to the loss of the child and the instruction to continue the flagellation was given more with the intent to keep them busy than with an idea that resuscitation could be accomplished. I then gave my attention to the mother, in delivery of the placenta and suturing the perineum. One hour after the birth of the child, I again examined it. It had not breathed and the whole body was cyanosed. The attendant faithful to instructions, had kept up the flagellation. She told me the child had gasped a few times while I was busy with the mother. I stepped in to see the mother again and upon my return to the kitchen where the child was, my attention was called to a slight pulsation in the neck before unnoticed. I immediately placed the child upon my lap and began artificial respiration with continued flagellation of the chest. After one hour's continuous and persistent work the child was breathing normally or nearly so. Thus the child did not breathe until two hours after the birth.

This case was deemed worthy of report on account of the successful resuscitation after such a remarkable period of time had elapsed.

Two conclusions may be drawn from this case which are worthy of note:

First.—The question may well be raised whether newborn infants are not too often pronounced dead before sufficient efforts at resuscitation are made.

Second.—The value of flagellation of the chest in restoring and maintaining the heart's action. The first sign of life in this infant was the slight venous pulsation in the neck.

PORRO-CAESARIAN SECTION.

BY THEODORE L. CHASE, M. D., PHILADELPHIA.

THE removal of the foetus through a coeliotomy incision has been practiced since pre-historic times. Felkin witnessed the performance of a Cæsarian section by one of the Uganda natives; thus proving that the operation has been handed down by uncivilized people. In the early history of Rome the ancient ruler Numa Pompilius advocated the enactment of a law whereby women dying near term should be subjected to Cæsarean section to deliver the child.

Up until the sixteenth century the operation was performed upon the mother immediately after death, in order to preserve the life of the child. Francois Rousset collected the histories of a number of Cæsarean operations, wherein he drew attention to the fact that there was a possibility of performing the operation upon the living mother. Trautmann of Wittenberg was probably the first surgeon to remove the foetus through the abdomen of the living woman, having performed this operation in 1610. Similar surgical procedures were in vogue until the year 1777, when they became obsolete, having been superseded by symphysiotomy, the popularity of which was of short duration.

At this time the Cæsarean operation consisted of simply incising the uterus, extracting the foetus and relying upon organic contraction to check hæmorrhage. It is no wonder that most of the patients so treated died from hæmorrhage or infection. In 1769 Lebas first introduced the method of suturing through the uterine incision; but it was not adopted and practiced by the profession. In 1876 Porro practiced amputating the body of the uterus, and stitching the cervical stump into the lower angle of the abdominal incision; thereby lessening the dangers from hæmorrhage and infection. This procedure gave better results than previous methods, and in consequence became quite popular.

To Sanger is due the credit of bringing the subject of uterine suturing to the general notice of the medical world in 1882. As the uterus was not amputated in his method of operation, it was termed the "conservative Cæsarean section," in contradistinction to Porro's method. Later, Porro's operation became perfected by the treatment of the cervical stump.

i. e., it was covered by suturing over a layer of peritoneum, and then permitted to retain its normal position in the pelvic cavity.

Report of a case, with recovery under unfavorable conditions.

B. W. (colored), aged 24, height 5 feet, weight 95 pounds, was seen by her attending physician about four weeks prior to entering the hospital. A diagnosis of pregnancy at full term was made, and the foetal heart-sounds were located. About ten days later she was again visited by her physician and the foetal heart-sounds were not distinguishable. After an interval of two and one-half weeks chloroform was administered to the patient, and an attempt was made to dilate the cervix with steel dilators. Owing to the presence of a profuse hæmorrhage the hand was introduced, supposedly into the uterus. As the hæmorrhage rapidly increased in severity placenta prævia was suspected, and the patient packed with iodoform gauze and conveyed to the Hahnemann Maternity Hospital on November 3d.

Upon her arrival blood was oozing through the vaginal pack in considerable quantities. A rapid examination showed absence of foetal heart-sounds and movements; pelvic measurements disclosed a generally contracted pelvis. After aseptic preparation a vaginal examination revealed the posterior lip of the cervix to be lacerated, the tear extending upward and to the left, involving the base of the broad ligament and opening into the peritoneal cavity. As the hæmorrhage was very profuse the area of laceration was firmly packed with iodoform gauze and the patient prepared for Cæsarean section.

Ether was administered at 9 P. M. The cœliotomy incision (1 centimeter to left of median line) was 15 centimeters in length, extending 4 centimeters above the umbilicus. The intestines were walled off with gauze and the uterus delivered through the abdominal incision. The uterine body was friable and very dark in color; the omentum was attached over the anterior surface of the uterus, and gangrenous in its lower two-thirds. The broad ligaments were digitally compressed while the uterus was incised.

The foetus upon removal was found to be soft and macerated. The gangrenous areas of the omentum were amputated, the broad ligaments on either side were ligated and severed. Amputation of the cervix was made at the junction of the in-

ternal os. The cervix was sutured and covered with peritoneum. The lacerated area extending into the peritoneal cavity was left with its former packing intact, and another strip of iodoform gauze was placed down to the cervix and brought out through the lower portion of the *cœliotomy* incision. After thorough flushing of the abdominal cavity, two quarts of normal saline solution were allowed to remain, and the wound was closed with through and through sutures of interrupted catgut.

The time consumed by the operation was forty-five minutes; a saline infusion was administered subcutaneously under each breast. The patient was brought to the operating table with pulse 140, temperature 97°, and respiration 56; immediately following the operation the pulse was 156, temperature 96°, respiration 60. The subsequent record shows the conditions occurring during convalescence:

	Tempr.	Pulse.	Respr.	General Condition.
1st day	98°	152	52	Severely shocked.
2d day	100°	130	34	Less signs of shock.
3d day	101°	144	26	Bowels moved; passed gas.
4th day	100.5°	132	28	Quite comfortable.
5th day	100.2°	122	24	Slight diarrhœa.
6th day	100°	104	24	Diarrhœa continues; pain through intestines.
7th day	100°	112	24	Backache; pain through intestines.
8th day	101°	112	26	Less pain in back and intestines; very nervous.
9th day	100°	104	20	Annoying cough; otherwise comfortable.
10th day	100°	102	18	Comfortable.
11th day	99.4°	104	22	Comfortable.
12th day	99.2°	100	24	Comfortable.
13th day	98°	108	20	Comfortable.
14th day	98.4°	84	24	Comfortable.

After this time convalescence was uninterrupted.

Report of case, death occurring eighteen hours following operation.

B. M. (white, aged 33, height 5 feet 4 inches, weight 112 pounds) had been in labor forty-eight hours, forceps having been applied four times; the instrument slipping when traction was made. The patient was brought to the Hahnemann Maternity in an exhausted condition. Examination under anæsthesia revealed extensive contusion about the vulva. The vagina was much swollen, and the cervix lacerated posteriorly for a depth of three centimeters. The presenting head was

found at the superior strait; being prevented from further descent by an exostosis protruding from the sacrum, slightly to the left of the median line, and projecting out into the pelvic cavity. Craniotomy was decided upon; but while the trephine was being used, rupture of the uterus occurred. The patient was immediately transferred to the clinic amphitheatre and the abdomen opened. The child was extruded into the peritoneal cavity, and the placenta was found in the sub-hepatic space; the uterus was well contracted, showing a transverse rent at the junction of the cervix with the body. The fœtus and placenta were extracted, while hæmorrhage was controlled by grasping the broad ligaments on either side. The uterine and ovarian arteries were clamped and the uterus removed, leaving a cervical stump, which was covered by peritoneum. The abdominal cavity was freely flushed with saline solution and the celiotomy wound closed with interrupted sutures. The patient was returned to the ward in a shocked condition, death occurring eighteen hours following the operation.

The first case shows that recovery sometimes follows where radical measures are carried out. The second case would have stood a fair chance of recovery if the exostosis had been recognized at the beginning of labor.

COCCULUS INDICUS.

BY F. J. SLOUGH, M. D., ALLENTOWN, PA.

(Read before the Lehigh Valley Homœopathic Medical Society.)

COCCULUS INDICUS, as described in the American Homœopathic Pharmacopœa, is a climbing shrub found in the eastern parts of the Indian peninsula, in eastern Bengal and in the Malay Islands. The fruit, is the part used in medicine, looks like a small round berry and of a very bitter taste. According to the American Homœopathic Pharmacopœa the drug strength of the tincture is 1-10. The drug was first proved by Hahnemann, and he undoubtedly proved it most thoroughly, as he did with most remedies he investigated. In Hahnemann's book called the *Raive Artzueimittlehre*, first part, third edition, will be found that he called it *kockel-samen*, or *menis perium cocculus*. Very little is written in

allopathic works on *cocculus indicus* except in the National Dispensatory it is stated to be very poisonous, and is recommended for no diseases; it has evidently hardly been used by the allopathic profession so far as I am able to find.

Hahnemann describes a case of poisoning in a druggist where he was called to see the man who had taken a single grain which made him unconscious; Hahnemann administered as an antidote an emulsion of fifteen grains of camphor, and the severe unconsciousness was relieved in an hour's time, but Hahnemann concluded that if he had administered thirty grains of camphor in emulsion he would have recovered consciousness much sooner. This case Hahnemann described in his lesser writings on *cocculus*. My attention was drawn to *cocculus* the first few years of my practice. It was a common thing for a homœopath at that time especially to be asked about once a month: "Doctor, suppose one of us would get cramp of the stomach, gastralgia or cramp in the bowels, how could you save us from the dreadful pains with your little pills. We have had you now for our children and are well satisfied." I said, "Well I don't blame you for asking me those questions, because the allopathic physicians have frequently made those assertions about homœopaths over and over again." I always told them, "if you know of any cases of cramp of the stomach which the allopaths cannot cure with their morphine in powder form, (as at that time there were no hypodermic syringes in existence, so that it had to be given by the mouth), I will cure those cases so that they will have no recurrence of those attacks by giving the indicated remedy." I had then found that *cocculus* was the remedy both in men, and more especially so in women. Cramp of the stomach is the common name among the laity for a condition which medical books describe as a neurosis of the stomach, gastralgia, gastrodynia or cardialgia. The old school authorities say that the prognosis is favorable, but recurrence is very common. The symptoms are characteristic; party is suddenly seized with agonizing pain in epigastric region which passes towards the back and around the lower ribs, pain is described as cramping, contracting, twisting, cutting, shooting, darting, boring, aching and burning, faint deathly feeling, nausea and vomiting, difficulty in thinking and low spirited.

Cocculus covers most, if not all the symptoms that belong to the above disease. Violent cramp in the stomach, contractive

pain in epigastrium, taking away the breath, painful fulness in stomach, pain as if beaten in hypochondriac regions, spasmodic flatulent colic, not much relief from passing of flatus, disposition to vomit, nausea, often diarrhœa and again constipation, painful pressure in uterus with cramps, etc.

Cocculus has never failed me when indicated as described. I usually prescribed it in the first decimal dilution. Within the last four weeks I have heard from four different parties who had no recurrence of cramp in the stomach for over six years, disproving the allopathic theory that recurrences were so very frequent. During my forty-three years' practice I cannot recall a single case where the allopaths had the cases for a long time, recurrence after recurrence with them, that came to me that was not cured with cocculus and remained cured with no recurrence. I do not mean that when gall stones or cancer was the cause of the pain that cocculus would cure those.

In another trouble to a great many women and children I prescribe cocculus very often for the sickness caused by riding on electric cars, steam cars or carriage riding with the happiest results. The symptoms are usually first, stupid feeling in the head, vertigo, vertigo with inclination to vomit, longing for cold drinks, nausea, continuous nausea and vomiting, faint death-like feeling, headache, pain in stomach, chills alternating with heat. The reports from hundreds of people in the Lehigh Valley where people have to travel on electric cars all the time are very satisfactory as they all claim if they use the remedy they have no trouble in traveling. First decimal to the third dilution is usually used by me.

ACNE AND SORES FROM CUPRUM ARSENICOSUM.—In *Bulletin Medical du Nord*, there recently appeared an account of a man, aged twenty-two years, who having been working in English green, developed upon his face scattered pustules of acne; and in his cruro-genital region a series of small ulcers with sharply defined borders and greenish bottoms surrounded by reddish surface. The sores were painless. They formed two separate groups of irregular form, the one upon the thigh, the other upon the scrotum on the corresponding side. There was some itching. Heat caused the scrotum to cleave to the thigh, obstructing walking. These pathogenetic effects may later prove of use. They healed up quickly after bathing and starch dustings.—*Hom. Recorder.*

NOTES ON MATERIA MEDICA.

BY MALCOLM E. DOUGLASS, M. D., BALTIMORE, MD.

CAMPHOR.

Physiological Action.—Camphor will, in very large doses, cause death, preceded by delirium, coma, and convulsions. In smaller doses it is a sedative with power to increase the tone and improve the functional activity of the nervous system; it also has the power of a direct irritant to the alimentary canal, and also to the mucous tract of the genito-urinary organs.

One of the phenomena which have been often, though not always, noted in severe camphor poisoning, is dilatation of the superficial vessels, especially of the head and face; this is usually accompanied by delirium.

Upon the skin camphor is well known to act as an irritant. A concentrated solution rubbed in soon causes heat and bright-redness; and if it be applied to a raw surface there are intolerable burning and consecutive inflammation.

Therapeutic Action.—The allopathic school make use of camphor as a remedy for functional nervous disorders, and in many forms of diarrhoea. They also use it in the form of a liniment for pains of various kinds, but claim that its action is very uncertain. It is also recommended by them as a *diaphoretic*. It causes dilatation of the peripheral vessels, attended by copious sweat, when used in the form of camphor-vapor, from the heating of camphor on a plate over which the patient sits with a blanket pinned around his neck, so that the fumes do not enter the throat.

The eclectics make use of the remedy in the excitable *mania* of exhausting fevers. It allays nervous excitement and produces a general tranquility of feeling. The latter school claim that it is a sovereign remedy for *acute coryza*—"cold in the head," by inhalation or taken internally. In acute and chronic catarrh it has a tonic yet soothing effect upon the mucous membranes. It controls hypersecretion and restores normal functional action.

These facts, they claim, are also true in catarrhal *bronchitis*, in *asthma*, and in *whooping cough*. It is the anti-spasmodic influence of the agent they depend upon. It also has a marked

anaphrodisiac influence, and has been given freely in nymphomania, satyriasis and erotomania. Its influence in controlling sexual excitement is positive. It cures priapism, chordee, and in a general way reduces the power of erection and the sexual appetite. In sexual weakness and in nocturnal emissions accompanied with erotic excitement from over indulgence, with violent erections, it is of much use. It is combined with opium and ipecac in the well-known *Diaphoretic Powder*, in the proportions of one part each of camphor, opium, and ipecac, with seven parts of the potassium sulphate. The dose is from two to ten grains.

It is a stimulating antiseptic of much value when applied to wounds, or applied externally. It is applied in mild forms of neuralgia, especially of superficial nerves, to toothache, to local swellings and inflammations, in *lumbago*, in myalgia, and in *tic douloureux*. It is positively useful in suppressing the secretion of milk, when from inflammation or other cause this becomes necessary. There are but few remedies better. It soothes pain and distress, and assists in controlling any existing inflammation. In a concentrated form, in a full dose, it is an active stimulant and will overcome chill and depression and restore warmth, increased power of the circulation, without increasing the pulse rate, and increases the activity of the excretory function of the skin and of the kidneys.

General Action.—It produces violent convulsions, hysterical and epileptiform, delirium, and various phases of nervous excitement. It also produces coldness of the body and profound collapse, with feeble pulse. (Cupr. terebinth., secale, ars., ver. alb., carb. veg., op., hyos., stram., alcohol).

Distension of veins. Inflammations. Drunken appearance. Symptoms like delirium tremens, optical delusions, fright, screams, hideous sights, and burying his head in pillow (stram., hyos.) Falling down insensible. Convulsions; in children; with loss of consciousness; with disordered expression of face and livid aspect; violent, especially of hands and feet. Clonic convulsive movements. *Convulsive circular motions* (rotation of arms).

Subsultus tendinum and insensibility. Epileptic fit, in which the tongue was badly bitten. Several times the body curled itself up into a ball and projected itself out again with great activity. Froth oozing from mouth, and constant chewing motions, twitching of head, and cold sweat on face, which was

bluish or purple, cadaverous and distorted, masseter muscle so contracted that the jaw could not be depressed.

Convulsions in which opisthotonos was considerable, whole surface red, eyeballs injected and prominent for an instant; then eyes forcibly closed, loud moaning, grinding of teeth and blowing of bloody saliva through closed teeth; after half an hour rapid rolling over and over, now this way, now that, and burying face in pillow, so that breathing was difficult.

Stiffness and early stage of opisthotonos. Cataleptic rigidity, with unconsciousness, then relaxed and sinking down so that he could scarcely be held upright, then vomiting and return of consciousness. *Easily startled when awake, with throbbings.*

General discomfort and *restlessness*; at night; constant walking about the room. Feeling at night as if he could fly and as if he were drawn into the air in spite of himself. Aggr. of pains in evening; and during motion. Amel. of symptoms from profuse sweat. It may be given to new-born children who have been asphyxiated, and who have spasms in consequence. Great coldness of the surface of the body, and rapid sinking of strength, sometimes with delirium or convulsions. General feeling of soreness as if beaten. Spasms, especially in children. Effects of shocks from injuries, and coldness of surface of body, etc. Consequences of suppressed eruptions in scarlet fever, and especially in measles, the skin is blue and cold. It may be used as an antidote to irritant poisons; and for the effects of poisonous insects, tobacco, mushrooms, etc. It is used in prostration occurring suddenly and increasing rapidly. Wild talk, and constant repetition of same sentence.

Dread of being alone in the dark (Stram.) Vague sense of impending danger, amel. by walking rapidly until he perspired. Indescribable wretchedness. Agitation. Haste.

With the collapse extreme anxiety and restlessness in some cases, in some great lethargy, can scarcely be aroused, in others loss of consciousness or even delirium.

Aching of head as from constriction of brain; as if brain were compressed from all sides, better thinking about it. Contractive pain at base of brain, especially in occiput and above nose. Heaviness of head; especially in vertex; with vertigo and sinking backward of head; dizzy. Vertigo; when sitting; worse stooping, with heaviness of head. Limbs cold and

cramped. Aching above frontal bone, with nausea. Throbbing in cerebellum.

It has been used after sunstroke, especially with beating pain in the cerebellum. The predominating head symptoms are throbbing, or constrictive as if knotted up, with general coldness.

Eyes; hollow. Staring; distorted. Eyes generally turned to left, lachrymation. Pupils contracted. Glittering of objects. Letters ran together on reading script in forenoon, after ceasing to read a bright circle before eyes. Wonderful forms float before eyes. Black floating spots. Sparks and fiery wheels.

Red ulcer in left external meatus, with sticking on pressure. Lobules red.

Air of room breathed through the nose seemed cooler when walking. Sneezing. Coryza; stopped.

The first stages of violent coryza, generally dry, with sneezing and flatulence. A palliative in many forms of fluent coryza, especially hay fever.

Face; Pale and anxious; distorted and sunken; and livid. Red; cheeks and lobules of ears. Bluish. Collapsed expression, with cold sweat, blue lips, etc. (Cupr.).

Teeth seemed too long, with toothache, which seemed to originate from the swelling of submaxillary glands. Speech feeble, broken (Stram.), hoarse. Salivation; at times slimy and tenacious; watery. Taste increased to all food. Tongue cold, mouth cold, breath cold. Heat; in stomach and in pharynx. Thirst; at night. Eructations; after eating; of contents of stomach.

Abdomen.—Heat in upper and lower. Coldness in upper and lower. Constrictive pain below short ribs, extending into lumbar vertebræ.

Colic, insatiable thirst. Vomiting, with cold sweat, great exhaustion. Internal burning in abdomen, with external coldness.

In cholera infantum, vomiting and diarrhœa suddenly, pains, with coldness of the body, etc. In Asiatic cholera, in the early stage, when the stools are loose and contain fecal matter, in a later stage with coldness, but, as a rule, with dryness of the surface of the body, with sudden suppression of the discharges and collapse (the remedy should be stopped when the patient

perspires). Dose: one drop of spirits of camphor (1 part of camphor to 12 parts of alcohol, by weight) on sugar every five minutes. At the same time external applications of camphor, fumigations of camphor and if the mouth is spasmodically closed, enemata with camphor.

Camphor has induced strangury, tenesmus of the bladder, burning urine. It will be found to antidote the strangury caused by cantharides, and to cure these affections homœopathically, when occurring as natural diseases.

Camphor causes and cures chordee, effects of sudden suppression of gonorrhœal discharge, coldness, strangury, etc. Sexual excitement in women. Puerperal mania, with suppressed discharges, dryness of the surface, etc.

Mucus in windpipe, making the voice husky and not removed by hacking and clearing throat. Suffocative dyspnœa, as if from pressure in pit of stomach. Respiration almost arrested. Respiration external, laborious, without assistance of abdominal muscles. Short cough from scraping in throat. Dry, hacking cough.

Asthmatic attacks, with great suffocation. Violent dry cough, especially in measles, with suppressed eruption, with congestion of lungs, etc.

Stitches in left chest when walking. Indefinable distress, coldness, with sleepiness. Palpitation. Slow and intermittent pulse. Drawing stitches through and between scapulæ on moving arm, extending into chest.

Difficulty of motion. Numbness; with tingling and coldness of legs.

Pressure in right elbow, aggr. by leaning upon it, when it extends into hand. Staggering as if drunk. Cracking and creaking in hip-joints, in knees and ankles. Pain in right thigh and on inner side near and below patella, he fears that the leg will bend forward suddenly. Drawing in muscles of left calf when sitting, extending into foot. Tearing cramp pain on dorsum, extending along outer side of calf to thigh. Drawing cramp pain on dorsa, worse on motion. Cramps in calves.

Coldness; after eating, with cold arms, hands and feet. Sensitiveness to cold air; in evening, with headache as from constriction of brain. Takes cold easily. Chill with chattering of teeth; with gooseflesh, also with sensitiveness of skin to

slightest touch. Chill of skin. Internal coldness, worse walking. Coldness of forehead, cheeks and hands. Cold limbs; hands and feet; fingers. Internal coldness in right thigh as from a cold wind. Cold sensation in right leg and toes; in right leg as from a cold wind; in left ankle as if a cold wind blew downward through calf, on foot a similar sensation when standing. Coldness of feet, with heat of head.

Feeling as if cold wind were blowing over the body. Congestive chill, icy coldness over whole surface of body.

CAMPBOR MONOBROMATE.

Dose, from one-tenth to five grains.

For children a good preparation is made by taking one part of the crystals and triturating it thoroughly with nine parts of the sugar of milk. Of this, one grain may be given every hour to a child of two years.

Physiological Action.—The agent has the properties of a stimulating sedative, exalting the nervous functions when depressed, when there is great restlessness, excitability or delirium. It has marked anodyne and hypnotic properties under proper circumstances.

Therapeutic Action.—It is prescribed in *nervous excitement* or extreme restlessness accompanying inflammatory disease or protracted fevers. It is specific in nervous irritation from reflex causes.

It is an excellent remedy for children with the long train of symptoms resulting from irritation of the dental nerve.

The indications are diarrhœa, nausea, great restlessness, fulness of the circulation of the head, with heat, sleeping with half open eyes, rolling of the head, and tossing, crying out with little sharp cries. These symptoms occur at any time during development of the milk teeth.

In fully developed cases of cholera infantum, with the extreme symptoms of involuntary watery discharges, cold extremities, pinched features, emaciation, apparently uncontrollable vomiting, this agent is given in full doses, and it will often meet alone the whole train of indications.

It is a hypnotic when fever and general distress induce wakefulness.

In *delirium tremens* it has produced good results, and in mild

cases of the *delirium* of protracted fevers, with restlessness, it will be found of advantage.

It has been used in *chorea*, and in hysterical manifestations of an excitable character, and in nervous *palpitation*, and irregular heart action from reflex irritation.

BI-SULPHIDE OF CARBON.

Physiological Action.—Workmen exposed to its fumes are affected with headache, vertigo, and over-excitement of the nervous system, as evinced by voluble talking, incoherent singing, immoderate laughter, or weeping.

A long continuance of exposure causes a kind of cachexia, characterized by general weakness, loss of sexual appetite, dullness of sight and hearing, and loss of memory.

It does not seem to cause any lesion of the brain (in rabbits killed by its fumes), but only congestion of the lungs.

Among the provings we note the following characteristic provings:

Great absence of mind, with difficult apprehension of what is read; they forgot what they had to do; sought for things which were lying before them; could not find the right words when speaking; cheerfulness, with inclination to sing; frequent attacks of vertigo when sitting; great dulness of the head; headache of different kinds, mostly frontal; head very painful when brushing the hair, particularly on the vertex. Violent stitches and contractive pain in the left ear, at night; ringing in the ears, lasting several days. End of the nose burns, and is quite red; eruption on the nose. In the mornings, after shaving, a red eruption on the cheeks and nose similar to the eruptions on the noses of hard drinkers, looking like tetter, and lasting till night; eruption makes its appearance after drinking a glass of beer. Drawing, tearing toothache, from evening till midnight, more endurable in the greatest cold; sensation of coldness, first on the tongue, then in the mouth, which quickly rises to a stitching burning; burning, pungent pain on the tongue, as from peppermint, with peculiar onion or garlic taste.

Severe stitching, contracting pain in the upper part of the œsophagus, as if a piece of bone had lodged there. Rising of flatulence, tasting and smelling of the medicine; also disagreeable, putrid-tasting, nauseous fluid; extraordinary

amount of loud eructations, and very stinking flatus in the evening; better from belching; inclination to vomit; pain in scrobiculum; pressure of stomach; impeded respiration. Vomiting of greenish, bilious masses, accompanied with nausea, cold sweat, and dejection of spirits. Pressing, stitching pains, of short duration, in the pit of the stomach, beginning at one point and radiating to the cardiac region, like neuralgic colic, followed by loud belching, which gives relief. Pains in the bowels, with twisting, rolling, and rumbling as if diarrhœa would set in. Gripping pains in the bowels, followed by stool; after the stool the pain ceases. Puffiness of the abdomen, with bruised, sore feeling of the abdominal walls. Single, fine, jerking stitches, extending from the right side of the umbilical region toward the bladder. Papescent stool, with urging; during the passage, and particularly afterwards, a feeling of weakness and trembling. Stool always papescent and small; papescent stool with discharge of blood. During rumbling in the bowels, violent diarrhœa of sour-smelling stools, with tenesmus. Awakes at five-thirty A. M., with urging to stool; profuse, thin, yellowish evacuations, followed by burning at the anus, as from an acid.

Entire want of sexual desire, and of erections; inability to have sexual intercourse (constant); complete impotence, with atrophied testicles. Erection at night, with emission of semen. Left testicle and epididymis swollen and indurated. Immediately after lying down, violent, asthmatic, dry cough, brought on by a continued and irritating tickling in the upper part of the pharynx, causing much straining of the chest, and producing pain. Congestion of the lungs, which appears to affect the upper lobes most. Constrictive, stitching, pressing pains in the chest. Feeling as if a heavy load was hanging on the back (from one scapula to the other), weighing him down so that the head sank forward. Continual backache and pain in the loins. Stitches from the shoulder-joint to the elbow, or even to the wrist, especially violent after midnight, and during damp or cold weather. Violent rheumatic pain in the right arm, shoulder and neck. Crackling in the right shoulder joint from every motion, connected with more or less severe stitches from the shoulder-joint to the elbow, on every change of the weather. Itching and smarting of the hands, particularly between the fingers, where he discovered small vesicles.

Rheumatism of the lower extremities; the slightest motion brings on violent pains, particularly in the hips and knees, with redness and swelling of the feet from a severe cold. Dropsical swelling of the feet, arising from diseased condition of the liver. Inflammatory sciatica in left thigh, brought on by taking cold, with entire inability to walk. Chronic sciatica in right thigh, movements of the limbs impeded. Jerking, stitching, tearing, flying pains, returning at regular intervals, for a long time. Rheumatism, either without fever or with slight fever. Tearing in the limbs, with herpes of the face.

Great sleepiness the whole day, but at night restless sleep, with continual rolling about in bed; particularly with the head. Sleeplessness, with disturbed dreams, starting as from fright, followed during the day by lassitude, want of energy.

Heat of the whole body, with slight headache, followed by great debility, succeeded by sleep. Coldness, with succeeding burning pain. Coldness of the legs, with general warmth of the upper part of the body. Cold face; coldness in mouth; cold extremities.

Itch and herpetic diseases. Herpes phlyctænodes covering dorsal surface of the hand; vesicles appearing on a red, inflamed and swollen basis; partly close together, but mostly separated from each other. They contain an opaque, yellowish fluid, which is discharged, and forms thick, yellowish scabs; sometimes the discharge excoriates the surrounding parts and produces violent itching. Nodules on scalp, pustules on eyelid, eruption on nose and face. Itching on both thighs, right side of the back to the region of the kidneys, and on the right forearm, which necessitates scratching. On inspection, small, colorless pimples are seen, which, on scratching, are more irritated, and through the friction they redden, get points, and finally form an itch-like eruption.

An analysis of the provings shows that this remedy is an important one. The head symptoms are quite prominent, and it is reported to have cured the following kinds of headache: Violent pain in the head, increasing until it causes confusion of mind, with feverish attacks, cold extremities and spasmodic pulse.

It is recommended for facial neuralgia, and toothache brought on by warm food.

It causes quite severe intestinal irritation, and among the

curative symptoms you will find *chronic diarrhœa*, every four or six weeks, lasting one or two days, stools yellowish, frothy, sour-smelling, fluid, with tenesmus and colic in umbilical region at night. It is said to cure *constipation* with sour-smelling flatus.

The provings show that it is indicated for *rheumatism* of the upper and lower extremities, for *sciatica*, very severe, of both the left and right thigh. The rheumatism seems to be attended with much "cracking of the joints."

It is further recommended for "itch, tetter, impetigo, herpes, and other cutaneous eruptions."

THE TREATMENT OF NEPHRITIS.—Dr. Lambrechts, of Antwerp, calls our attention to the therapeutic value of *Tuberculinum* and *Arsenicum iodatum* in Albuminuria, in a work presented to the *Cercle Medical Homœopathique des Flandre*, at the commemorative meeting of the 150th anniversary of Hahnemann's birth.

He claims that since 1898 he has pointed out the efficacy of Koch tuberculin in the treatment of post-scarlatinal nephritis. He was led to experiment with this remedy in nephritis, because he had been impressed by the constancy and intensity of the renal phenomena in tuberculous patients under Koch's tuberculin. In fact, when a relatively feeble dose is injected in a phthisical patient with sound kidneys, acute pains soon appear in the renal region, the urine becomes albuminous and contains sometimes a notable quantity of blood; and so we can see that tuberculin can provoke a well characterized acute nephritis (renal pains, albuminuria, hematuria).

THE CHOLERA IN GERMANY.—Dr. Hesse, of Mannheim, formerly of Hamburg, praises highly, as a prophylactic against *Asiatic Cholera*, the advice of the late Dr. C. Hering, consisting in putting powdered *Sulphur* on the inside of the shoes or stockings every three days. He lays great stress on the importance of promoting sweating by the ordinary means (hot drinks, heavy covering, hot water bags, &c.), but not to resort to cold applications of any kind, and to keep the pores open for at least 8 to 12 hours, being careful to avoid any cooling of the body through uncovering, &c. Internally he prescribes principally *Veratrum*; in *stadium asphicticum*; *camphora*. In a severe case where *Veratrum* proved ineffectual, *cuprum arsenicosum* acted well. The death rate in his practice was 20%, but he states that had he paid more attention at the beginning to the promotion of sweating and not allow any cooling of the body to take place, the percentage would have been perhaps less. He remembered that the cause of the great mortality at Hamburg, was among others, the transportation of the sick to the cholera hospitals. To reach these places many lives were sacrificed that could perhaps have been saved otherwise.—*Populare Zeitschrift für Homœopathie*.

E. FORNIAS, M. D.

EDITORIAL.

THE INCORPORATION OF OUR MEDICAL SOCIETIES.

THE proposed change in the method of publishing the transactions of the American Institute of Homœopathy *demands* that our national association shall become an incorporated body. Such a course should have been adopted long before this, as without incorporation, a society as such cannot exist as a responsible body. We believe that all our County and State associations should take this step. Until they do so, they can have no standing in the eyes of the law.

In preparing articles of incorporation, the most important matter relates to the trustees, the determination of their number, their powers, and methods of election, and a statement as to the objects of the new organization. The number of trustees to be elected, must depend upon the duties expected of them and the society, whether large or small, general or local. As a general rule, a small trustee body works better than a large one, especially as in any board, there are generally one or two members who shape the policy and determine the opinions of the majority. Large bodies are as a rule unwieldy, and oft-times inattentive. Habitual absences tend to prevent quorums. A faithful few is better than an inattentive many. In local societies, the large board has much to commend it, because the difficulties in regular attendance are at a minimum, and general business matters can well be left to the discretion of its members, leaving purely scientific discussions to the corporate body. In the case of the American Institute, we would make the number of trustees small in comparison to the society membership,—namely, not less than six or more than fifteen. Probably nine, the number in service in the Pennsylvania State Society, is the most practicable. The importance of their duties calls for regular attendance at not only trustee meetings, but also on all sessions of the electing body. Hence, we believe it to be

but just that the railroad and hotel expenses of the trustees should be paid by the Institute.

Careful consideration of the powers delegated to trustees should be had. In the absence of any specifications, the powers given them by the laws of the majority of the States make them the actual governing body of the corporation, the members thereof having no rights beyond those accorded them by the courtesy of the trustees. The autocratic powers of the trustees then demands that societies shall safeguard themselves by by-laws governing their election, and by exercising discretion in their selection. The too frequently adopted scheme of closing the nominations before opportunities for hearing from all members who may wish to express a wish should have no place at such a time.

The question as to whether the general officers of the society should be made members of the board of trustees is a matter concerning which there may well be differences of opinion. Among corporations transacting a business, as railroading, manufacturing, etc., it is customary for the trustees to elect all the officers. In the case of medical societies, we do not deem such a system advisable. On the contrary, we think it the better plan for the Society to elect its own officers as well as its trustees. Inasmuch as the president is expected to shape the policy of the organization during his incumbency, and the vice-presidents may by force of circumstances be obliged to do so, and the secretary and treasurer are executive officers well acquainted with the executive and financial affairs respectively, these officers should be made *de facto* members of the board.

The terms of service of trustees should be comparatively long. The Pennsylvania State Society has made it three years, which we believe very proper. Such a term is necessary as trustees do not attain their full utility to their organization until they have gotten a mental grasp on the society's business affairs. The powers of the trustees can readily make them a self-perpetuating body. Hence, it is wise to make by-laws which shall limit their powers in one way or another. If the president and other officers, who are elected annually, are made to serve as additional trustees, we see no necessity for further safeguarding the organization's interests. If the trustees elected as such constitute the full board, we believe that some system which shall give a minority representation should be adopt-

ed. The plans to this end suggesting themselves to our mind are as follows :

1. Cumulative voting. If three trustees are to be elected, members may cast as many as three votes for any one of the nominees. This system is not one which has met with approval when tried, and is mentioned here for completeness.

2. Voting a short ticket. Three members to be elected, members of the society are permitted to vote for but two. This plan insures minority representation, and is the one adopted in numerous civil communities for the election of police magistrates, county commissioners, etc.

3. Limitation of terms of service. To prevent the perpetuation of power by one or two men,—generally a bug-a-boo of the “outs,” though occasionally a menace to the welfare of the society it may be a wise plan to make trustees ineligible to succeed themselves, *i. e.*, one year of private life should elapse between their retirement and re-election.

In closing, let us express as our opinion that all of our societies, however small and seemingly unimportant, should incorporate. The time must come when they will be large and of great importance. Their incorporation will surely make them more useful to the parent bodies, namely, the State societies and the American Institute of Homœopathy. The time may come when only incorporated bodies can secure recognition. Concerning this subject of incorporation of medical societies, we close by quoting from the Presidential address of Dr. Jno. J. Tuller delivered before the Homœopathic Medical Society of the County of Philadelphia, and submit it to the careful consideration of our society officers the country over.

“What is the first step to be taken in this direction? I hold that it should be an incorporated body; that when it speaks it can speak with the voice of an organized body recognized by the laws of the State; that when it makes its demands upon the governments of our city and State for at least a minority representation it cannot be turned aside with the ease of an institution that has no influence and has no right to exist. It must stand for what it should represent: the great central organization of the homœopathic profession of this city; a profession that represents so much in the contribution to the support of the city. When the question of municipal representation by the homœopaths comes up, our fellow-practitioners of the other

schools sneer and hold us up to derision in spite of the fact that we hold medical control over fully one-quarter of the city's population. This of itself should spur us on to fight for our rights and to force our way into the privilege of having a voice in the city's medical control. At a meeting of the society in the spring of the present year, provision was made for the appointment of a committee by the president to look after the legal affairs of the society, and I suggest that this committee be instructed to make such inquiries and take such action as will put the society in full information of the costs and necessary steps to be taken to incorporate this body under the laws of the State.

"Let me put another question to you: Where is the individual physician to turn for protection? He cannot turn to his fellow-practitioners; he cannot turn to any small, unrepresentative society. Allow that in the true and legitimate performance of his function as a physician he meets an obstacle that perhaps will destroy his whole career, who is going to protect him? Where can he turn? Surely not to this unorganized body. He must place himself upon his own footing and rise or fall upon his own individual effort. This society should do all in its power to protect its members and the members of the profession. I know of no class of men who are laboring together in the same cause where there is so little brotherhood among them. Members of the legal profession bind themselves together to protect their great body against their common foe, 'the shyster lawyer,' and the organization is the Bar Association. It is an aspiration in the heart of every young man who graduates, or is admitted to the bar, to fit himself to be a member of this organization. It is a strong, representative body, and when it places itself behind a man its weight is a powerful one. What have we to place behind a man? What organized force or weight can we bring to bear to sustain him when we demand his recognition? What influence can we have when we go before a legalized body with demands when we do not protect ourselves or our profession? There are individual men in the homœopathic profession in the city whose influence behind a man bears a hundred times more weight than the whole list of our two hundred and fifty men enrolled as members of this society when it presents itself as the Homœopathic Society of the County of Philadelphia. This should not and must not be; the Society must place itself in a position to be a force and have the weight that is due it."

HAHNEMANN'S NEW POST-GRADUATE COURSE.

FOR several years there has been a growing demand among homœopathic physicians, and especially among Hahnemann graduates, that the Hahnemann Medical College of Philadelphia, should establish a post-graduate course. The Faculty did not deem it wise to institute such a course until the completion of the new clinic and the alterations in the dispensary and laboratories should give them the facilities to offer to the profession a course which was complete and up-to-date in every respect.

The object in view in laying out the course, has been to make it useful and available for the busy practitioner. The session will begin on May 7th, 1906, and continue until May 26th, 1906, thus covering a period of three weeks.

The work will be entirely of a practical character, and the time will be devoted largely to clinical and laboratory work. The course will be divided into three sections; clinical, laboratory and special. Either of these may be taken alone or two or three of them combined.

The value of the opportunity for advancement in professional proficiency, and of pleasant fellowship, which such a course offers to the hard-working medical practitioner can hardly be overestimated. The duties of his profession make such demands upon the time of the average physician that his opportunities for study and research along new lines of medical progress are very limited. Homœopathic physicians who are located in small communities where there are no medical societies with which they can affiliate themselves greatly feel the need of that spirit of enthusiasm and energy which is engendered by association with large bodies of fellow-workers. The post-graduate course offers to all such physicians a most profitable and pleasant way of obtaining both the knowledge and enthusiasm which contribute so much to the success of the practitioner of medicine. Provision has been made also in the course for those who desire to perfect themselves in special lines of work.

The clinical material which is available in the wards and out-patient department of the Hahnemann Hospital is abundant. There is no institution on this side of the Atlantic which has greater facilities for teaching clinical medicine in a practical way.

The course which the Faculty has outlined merits the enthusiastic support of every alumnus of "Old Hahnemann," and the commendation of every physician interested in the advancement of medical education.

THE PRESENT DECLINE OF ART IN MEDICINE.

THE above title was the subject of an address recently delivered before the Abernethian Society of London, by Sir Dyce Duckworth. The facts presented in this address were considered so important that the London *Lancet* made it the subject of an extended editorial comment. The ideas expressed are so closely in accord with the views set forth in an editorial in the December issue of the HAHNEMANNIAN MONTHLY under the title of "The Relation of the Physician to His Patient," that we take the liberty of presenting below some of the more important remarks of the editor of the *Lancet*:

In an admirable and a suggestive address on the Present Decline of Art in Medicine recently delivered before the Abernethian Society at St. Bartholomew's Hospital, Sir Dyce Duckworth sounds a timely note of warning. He points to the great advances made in recent years in the collateral medical sciences and to the influence which these advocates have exerted on the theory and practice of medicine and on the educational course which the student of to-day has to pursue. He then asks whether these changes have resulted in the production of a type of practitioner more skilful than his predecessors, who underwent a shorter and less scientific curriculum a quarter of a century ago, and comes to the conclusion that 'the finished products of the schools of to-day are at first but slenderly equipped to minister to the sick, to prescribe appropriately, or to manage their patients.' Sir Dyce Duckworth has had, as he himself says, unusual opportunities of observing the results of the modern scheme of medical education and there will probably be few who would deny that he is correct in his contention that the art of medicine has been much neglected and that it has materially declined. Indeed, a brief comparison of almost any text-book of medicine of to-day with one of 30 or 40 years ago will soon afford convincing proof of this, for in the latter we seem to deal with individual patients and their actual symptoms, in the former with generalisations, principles, and abstractions. It is most important clearly to realize that medicine is not an abstract or an exact science but that in practice it is an applied art, having its foundations in cer-

tain collateral sciences which may be both abstract and exact. The actual practice of medicine deals with processes which may be variously expressed in different individuals, though produced by an identical cause; it therefore demands a knowledge of the variations of disease and a study of the individual characteristics of patients—in other words, the ability to apply the general to the particular.

Sir Dyce Duckworth is of opinion that the student spends too long a time in the laboratories and too short a time in the wards and out-patient department in the study of actual medicine and surgery.

Instruction in the various subjects of the medical course tends to be too detached and perhaps too specialised, and it is open to question whether the student gets sufficient opportunity of applying the abstract knowledge which he acquires to the particular case of individual patients or whether the medical common sense—or *mens medica* as Sir Dyce Duckworth calls it—is sufficiently trained in our schools. The consideration of minor ailments is much neglected and it is the study of the rare and of the obscure which too often attracts the student. What wonder, therefore, that the newly qualified practitioner, especially if he has not held a resident appointment, find that he has much to learn when he embarks on practice. Primed with the latest laboratory lore he has, perhaps, to treat some slight indisposition which if he does not dismiss as neurotic he probably labels trivial and dismisses with scant consideration, giving at most a *placebo*. He has to learn in the exacting school of experience the true perspective of disease and, what is harder to acquire and equally useful, the rudiments of the patient's own perspective of his symptoms. There have been, indeed there are at present, many physicians who, steeped deep in scientific knowledge, have practiced medicine with the enthusiasm of the true artist and such men afford the highest example to the student. It is enthusiasm, sympathy, and sound judgment in applying principles to the case of each individual which are necessary. The art of practice cannot be acquired from books or even in laboratories but only by long and careful study of individual patients. The scientific attitude of mind naturally tends towards a scepticism which requires proof for everything but in medicine we cannot afford to neglect the empiric remedies which have stood the test of experience even though we wait in vain for a scientific explanation of their actions.

The practitioner and the student should also profit by the warning, since in the practice of medicine we must remember that the patients are not to be regarded as problems, except in

so far as the diagnosis of their condition is concerned, but as sick and suffering individuals who consult the practitioner for relief and advice, and therefore in all conditions the human aspect of the problems of disease should be kept constantly in mind.

A QUOTATION FROM POLK'S DIRECTORY: AND A STORY ON US.

A FEW months ago we made editorial mention of the attitude of the obituary editor of the *Journal of the American Association* in announcing the deaths of homœopathic physicians. This editorial led one of our friends to call our attention to the history of the editor of that journal as given in Polk's directory for 1904. On page 553 we read as follows:

SIMMONS, George H., A. M., M. D. (R), 131, '82, Rush Med. College, Chicago, Ill., 1892; L. M., Dublin, Ireland, '84; Editor Journal Am. Med. Ass'n; Sec. Am. Med., Western Surgical and Gynæcological Assns., etc., 103 Dearborn Av.

Referring to the key of medical colleges, we find that "131" stands for the Hahnemann Medical College of Chicago, 2811 Cottage Grove Ave. In other words, the editor of the *Journal of the American Medical Association*, was for ten years a homœopathic physician.

All of this though ancient history was news to us; and it brought to mind a story which, though a "chestnut," is always good.

A sailor was arrested and brought before a magistrate for assaulting a Jew. The guilt of the accused being plain, the magistrate said to the defendant, "How came you to assault an inoffensive citizen?" "Is he not one of the bloody Jews who crucified the Saviour?" replied the sailor. "Yes," said the magistrate, "but that was nearly 2,000 years ago." "Well," said the sailor, "I only heard of it last night."

CAPSICUM IN THE OBSTINATE DIARRHOEAS OF THE AGED.—Dr. Frederick Kopp regards Capsicum annum as the most beneficial remedy in those obstinate diarrhœas of the aged which resist the ordinary remedies. He gives drops of the tincture upon sugar or in sweetened water. Watery, frequent stool, accompanied by severe abdominal pains and a burning sensation about the anus. Weakness and exhaustion may be present in these cases.—*Hom. World, N. A. Jour.*

GLEANINGS.

THE QUICK CURATIVE TREATMENT OF GONORRHOEA.—Lyons reports a total of over 400 cases treated on this plan. In 384, or about 95%, he succeeded in curing the disease in six days, and in about 80% in twenty-four hours. In all these cases the gonococci were not seen in the secretion, at or after the times mentioned.

The plan of treatment is as follows: A smear of the discharge is made, if gonococci are found, and a fair proportion of epithelial cells present, also the history revealing an acute attack, he deems the case a suitable one and proceeds as follows: Having had the patient urinate, and without further irrigation, he injects into the urethra, one drachm and a half of a 4 per cent. solution of nitrate of silver, retaining the solution in the urethra from one to three minutes, and then allowing it to be rejected. In 24 hours, the discharge is again examined, and the gonococci are either absent or greatly reduced. If absent this ends the treatment, except for the general care of such a case. If gonococci are not absent the injection is repeated with a drachm and a half of a 2 per cent. solution, and in 24 hours a re-examination is made, and if gonococci are present a 1 per cent. solution is used. If the gonococci still persist the treatment is abandoned, and the symptomatic plan pursued.

He further discusses the relation of the gonococci to the epithelium of the urethra, and the various pathological changes, and finally states that the point of the matter lies in the fact that in the early period of the disease the gonococci lie entirely upon the outer layer of epithelial cells, and multiplying destroy them, causing them to exfoliate, this is carried on until the sub-epithelial layer has been laid bare, and the gonococci have invaded the deeper structures. He finally states that just so long as the epithelial cells show the colonies of gonococci studded over their fields, under the microscope, so long are the germs within reach of the germicide, and the case amenable to the quick curative plan of treatment.—*Medical Record*, November 4th, 1905.

G. MORRIS GOLDEN, M. D.

FREQUENCY AND ETIOLOGY OF ACUTE NON-TUBERCULOUS PNEUMONIA IN A GENERAL HOSPITAL.—William Travis Howard, Jr., basing his studies upon a series of 550 consecutive autopsies, covering a period of about seven years, states the following: All doubtful cases and cases of simple bronchitis were excluded. The diagnosis was made upon microscopic, as well as macroscopical findings. The classification used was that of croupous or lobar, broncho or lobular pneumonias. The 550 consecutive autopsies furnished 195 cases of acute non-tuberculous pneumonia, and incident of from 35 to 45 per cent. Of these cases 76, or about 61 per cent. occurred in the course of the acute infectious diseases. Of 43 autopsies in typhoid fever

cases in this series, 22 were broncho-pneumonic, and in 5 a croupous pneumonia. Of 81 patients with peritonitis from all causes, 36, or 45 per cent. had pneumonia.—*American Medicine*, October 28, 1905.

G. MORRIS GOLDEN, M. D.

SERUM THERAPY IN PNEUMONIA.—Dr. Renzi reports several cases of pneumonia treated successfully by Pane's serum, and discusses the subject generally. His experience has been most encouraging, particularly where the injections are given early in the disease. He claims that the patient says he feels better, and is obviously improved in his general condition. The local signs alter but little. The temperature comes down quickly, but defervescence takes place by lysis and not by crisis in cases treated with serum. Observations show that the serum treatment has a tonic effect on the blood pressure, for after injection no lowering of blood pressure occurs, whereas in cases otherwise treated, the blood pressure may be lowered for ten or fifteen days after the attack has subsided. The author is decidedly of the opinion that cases treated in this clinic by serum therapy, have done better than those not so treated, and if treatment could have been started earlier, the result would have been far better. The maximum dose of the serum given by him in twenty-four hours was 40 c. cm. of the N. 2 serum, in two doses of 20 c. cm. each.—*The Lancet*, October 21, 1905.

G. MORRIS GOLDEN, M. D.

ANTITOXIN OF UNUSUAL DOSAGE IN A CASE OF SCARLET FEVER, COMPLICATED BY DIPHTHERIA.—St. Clair Street, M. D., of Kansas City, Mo., reports a case of scarlet fever and diphtheria in which 67,000 units of antitoxin were used, before any response was noted. The case was an unusually severe one, in which the sequelæ were as follows: Otorrhœa, meningitis, adenitis, acute nephritis, paralysis of muscles of deglutition and larynx. Notwithstanding these conditions the case made a complete recovery.

He further states that he has used the antistreptococcic serum in this type of case, but without any results. Paton considers diphtheria antitoxin almost specific for septic conditions in general, and Bosanquet suggests that the anti-toxin may act in sepsis by the production of leucocytosis. In closing he states that the great lesson taught by the case is the propriety and necessity of continuing the dose of anti-toxin even when the patient does not seem to respond to it, and the further necessity of increasing the dose administered until such time as results are obtained.—*Medical Record*, Nov. 18, 1905.

G. MORRIS GOLDEN, M. D.

TRAUMATIC PNEUMONIA.—Bradwell, a fleet surgeon in the Royal Navy, reports in the *British Medical Journal* of October 14, 1905, an interesting case showing the relation of traumatism to pneumonia. A young man, age 20, while on duty, fell striking the left side of chest violently. Twelve hours later he complained of headache, pains over left side of chest, temp. 104° F., pulse 120, respirations 28. Later he developed crepitant rales, and within 36 hours the physical signs of a well marked pneumonic condition were present over left side of chest. The disease progressed. The crisis

occurring on the sixth day, with an uneventful recovery. The interest of this case centers in the fact that a severe blow over the left lung of a robust young man was followed in a few hours by a well marked left sided pneumonia. To eliminate the factor of coincidence he states there was no history of exposure, followed by a chill, or previous attack of the malady, and on the other hand the weather had been perfect, and pneumonia was not prevalent; in other words, there was no other predisposing influence other than traumatism, and secondly the left lung being the seat of the disease is in favor of the traumatic origin, since in acute pneumonia the right lung is the one most affected. He is of the belief that the pneumococcus finding itself in a favorable environment, that is damaged lung tissue, undergoes a rapid evolution into the higher and more virulent varieties associated with acute pneumonia.

G. MORRIS GOLDEN, M. D.

ON THE DISCRIMINATION OF "PHYSIOLOGICAL ALBUMINURIA," FROM THAT CAUSED BY RENAL DISEASE, AND ON THE MEANS OF CHECKING THE ALBUMINURIA WHERE IT OCCURS INDEPENDENTLY OF SUCH DISEASE.—A. E. Wright and G. W. Ross have made a study of this condition. Their technical methods are described at length. The discrimination between the two forms of albuminuria is estimated on the basis of the "excretory quotient," which is an expression of renal efficacy obtained by dividing the salt contents of a patient's blood into the salt content of his urine. They go on at length and describe the method used to obtain this quotient. The application of this plan to physiological albuminuria always shows a quotient of two or more. The same results can be obtained in healthy persons, and contrast in a marked manner with those derived from cases of renal disease. The condition in physiological albuminuria arises from a lymph transudation into intact urinary tubules. They further state that the appearance of albumin in the urine in physiological albuminuria is influenced by exercise, nervous disturbances, erect posture, and that under these conditions the hydrostatic pressure in the renal capillaries would be increased. It was also noted that a condition of diminished blood coagulability was found in many cases of physiological albuminuria, and that the output of albumin in such cases can be restrained by increasing the coagulability of the blood. They further believe that the use of calcium salts to increase the coagulability of the blood will also check the output of albumin in these physiological cases. They conclude by saying that when it is found that a patient possesses a normal excretory quotient, and that his albuminuria can be abolished by diminishing the hydrostatic pressure on the renal capillaries, and by increasing the coagulability of the blood, there is every reason to conclude that the kidney is free from organic disease, and that life is in no great danger.—*The Lancet*, October 21, 1905.

G. MORRIS GOLDEN, M. D.

PHLEBITIS FOLLOWING ABDOMINAL AND PELVIC OPERATIONS.—A. H. Corrier collected 232 cases of phlebitis following various abdominal and pelvic operations, and from these and his own experience, he describes the symptoms and treatment, and attempted to find the cause of the inflammation,

and why the left femoral or saphenous veins are so frequently attacked. So few patients die from this affection that pathological and post-mortem examinations are of little help. He made the following deductions:

1. This complication occurs in about 2 per cent. of all abdominal operations.

2. It follows operations on anæmic patients most frequently, as in abdominal hysterectomies for bleeding fibroids.

3. Vaginal hysterectomies for the same conditions are rarely followed by this complication.

4. It is more liable to follow so-called aseptic operations where no drainage is used.

5. It is due to a mild type of infection, and often to absorption of the necrotic pedicle at site of operation.

6. The disease attacks the left femoral or saphenous veins in over 90 per cent. of the cases.

7. Anatomic peculiarity of veins on the left side have not been found that satisfactorily explains why the disease has a predilection for left side.

8. That a *locus minoris resistentiæ* exists in left saphenous and femoral veins is proved by the frequency of the involvement of these veins.

9. The disease is, primarily, an inflammation of the walls of the vein and the thrombus, when one forms, is secondary, as a rule

10. Many cases of post-operative pneumonias, pleuritis, and cerebral emboli have their origin in this source.

11. Treatment consists in elevation of the affected leg, tonics, etc.—*Journal American Medical Association*, December 9, 1905.

J. D. ELLIOTT, M. D.

SITE OF ORIGIN OF GALLSTONES.—L. L. McArthur gave a brief extract of the clinical history and operation of a patient who died of septic cholangitis, and who denied any former previous illness or fever, and had never had a colic until his last illness. No stones were found in the gall-bladder which was moderately distended. On opening the common duct numerous stones, 246 were counted, floated out in stinking pus. As fast as they were taken out, more appeared, until, on account of the patient's desperate condition, it was deemed advisable to remove only those obstructing the duodenal end of the duct. At post-mortem the cholangitis was seen to extend into the lesser hepatic ducts, and wherever the liver was incised calculi were present in the ducts. Gall-stones consist of cholestrin alone, bilirubin calcium alone, or a combination of both. Normal bile contains traces of cholestrin, but never bilirubin calcium.

The source of cholestrin is in a degenerative process affecting the protoplasm of epithelial cells, columnar epithelium being the most prone to undergo this metamorphosis, and the influences necessary to induce these degenerative changes are resident in the protoplasmic poisons of somewhat attenuated bacterial organisms. Active, unattenuated cultures of the colon bacillus have been found, experimentally, to produce inflammatory changes, with pus formation but no stones. Bilirubin is a product of the activities of the liver cells in health, which under certain conditions may be precipitated with a calcium base, making an insoluble body, bilirubin calcium. These conditions are most often the result of bacterial fermentative action. As the

source of bilirubin is in the hepatic cells themselves, such stones may form in the smallest bile ducts. Stagnation of the bile stream is also an essential factor in the formation of gall stones, but can only act in conjunction with the factors before enumerated. Since the flow in the gall bladder is not as active as in the ducts themselves, this is the site of election of stone formation in many cases, but not, as some well known authorities yet teach, the only place.

The author drew the following conclusions:

1. All gall stones do not originate in the gall bladder.
2. The origin of cholestrin stones is probably in the gall bladder, with subsequent growth either in gall bladder or ducts where they may lodge.
3. Bilirubin calcium is the constituent of the smaller intrahepatic duct stones.
4. Calculi in immense numbers may have existed for months in the ducts without producing a symptom.
5. The surgeon need not reproach himself too much if there be recurrence of the symptoms after common duct drainage.—*Journal American Medical Association*, December 9, 1905.

J. D. ELLIOTT, M. D.

THE MANAGEMENT OF CERTAIN CRITICAL CASES OF INTESTINAL OBSTRUCTION.—Elliott refers to the high death rate in resection of the intestine for obstruction, especially when the gut is gangrenous. He thinks this is largely caused by leakage, due to the giving way of stitches in diseased tissue.

As a remedy, he advises bringing the intestine through the abdominal wall, dividing the lower end, suturing the mesenteric sides of the afferent and efferent limbs together, uniting the peritoneal layer of the intestine to the parietal peritoneum, closing and packing the wound, and excising the tumor or gangrenous area. Thus leaving an artificial anus, which can be easily closed.

Three cases are reported in which this method was used with good results. The article is finished with the following summary:

1. We find the prevalent method of enterectomy with immediate suture in cases of intestinal obstruction attended with a high mortality, due to the changed condition of the distended bowel.
2. Enterostomy with later enterectomy is to be reserved for the cases unable to bear primary enterectomy.
3. Enterectomy with a temporary artificial anus should be the operation of choice in all critical cases of intestinal obstruction, where there is an opportunity for resection, whether it involves the large or the small intestine.
4. The suggested improvements in the technique are as follows: The upper distended bowel should not be opened until the peritoneal cavity is completely closed. The open ends of the bowel should be stitched together on their mesenteric side before they are fastened into the parietal wound. This will greatly facilitate the later closing of the artificial anus. When the artificial anus is in the small intestine, the partially digested discharge from the upper opening should be collected and injected into the efferent opening.

5. The closing of the artificial anus is a safe operation, and hardly disturbs the convalescence.

6. Up to the present time not enough cases have been done by this method to estimate its relative mortality, but the cases here reported, with those referred to, suggest the probability of better results than have been obtained by enterectomy with immediate suture.—*Annals of Surgery*, November, 1905.

J. D. ELLIOTT, M. D.

REVIEW OF FIVE HUNDRED CASES OF GASTRO-ENTEROSTOMY.—Wm. J. Mayo states the results of 500 gastro-enterostomies performed by himself and Charles H. Mayo. Various methods of uniting the stomach and intestine have been used, including pyloroplasty, gastro-duodenostomy and gastro-jejunostomy. In computing mortality, every death which occurred in the hospital is charged to the operation. Sometimes secondary operations were repeated two to seven times before a good result was obtained.

Pyloroplasty was performed 21 times with no deaths and seven secondary operations (33.3%). Gastroduodenostomy (Finney) 58 times with four deaths (6.9%), and two secondary operations (3.4%). Gastrojejunostomy 421 times. There were 19 deaths (4.5%) in 307 benign cases. In the last 180 there were 4 deaths (2.2%), and only one death in the last 80. There were 21 re-opened cases in the 421 gastrojejunostomies (5%).

Pyloroplasty has a small field of usefulness, has little risk in suitable cases, and sometimes affects a cure. But it enlarges the calibre as much in an upward direction as downward in the line of drainage, and the extent to which this enlargement can be carried out is limited. The pylorus is exceedingly prone to become adherent after this operation, so that the opening remains at a high level.

Subjects for gastro-duodenostomy should be carefully selected; extensive disease, adhesions, a short gastro-hepatic omentum, and especially the presence of scar tissue, should be considered as contraindications, for it is in just these varieties that gastrojejunostomy gives the most satisfactory results. In selected cases the Finney operation is the one of choice.

The author reviews gastrojejunostomy thoroughly and describes the operation, which he now uses, in full.

He believes the posterior operation to be better than the anterior in benign cases, as the long loop surrounding the transverse colon is dangerous. And as it is sixteen to twenty inches in length, a large part of the value of the jejunum in digestion and absorption is lost. Contraction of the opening is also more likely to occur. The anterior operation, however, has some few indications. In cancer the disturbance is less, and, as the gastric juice has little acid, the patient cannot be expected to live long enough to develop a secondary jejunal ulcer, and the vicious circle occurs less frequently in the anterior than the posterior operation.

The two great causes of regurgitant vomiting are angulation and obstruction, and the short posterior loop of seven to ten inches gave the greatest number of such complications; therefore no loop is now made.

After pylorotomy and partial gastrectomy for cancer, the Murphy button is nearly always used. It gives an immediate opening and is particularly free from secondary complications. It should always be protected

by four or five mattress sutures placed at intervals. A continuous suture may prevent the button from passing out of position and cause it to lodge and act as a foreign body.

The McGraw ligature method is rapid and safe, and is valuable for occasional use; but immediate feeding is impossible and the length of time it will require to cut through is unknown. The description of the operation, which is well illustrated, is too long to print here, but the principal points are contained in the recapitulation. They are: (1) The gastric opening should be placed on the posterior wall, obliquely from above downward, and left to right (Moynihan's line). (2) The lowest point of the gastro-jejunosomy should be at the lowest point of the stomach, on a plane perpendicular with the cardiac orifice. (3) To insure this effect, the gastric incision should extend one-fourth to one-half of an inch onto the anterior wall. (4) The incision in the intestine should be longitudinal, opposite the mesentery, and begin from one to three inches from the origin of the jejunum, measuring on the anterior surface (Peterson's point of election). The exact distance depends on the ease of attachment, as short as can be conveniently done without tension.—*Annals of Surgery*, November, 1905.

J. D. ELLIOTT, M. D.

THE MCGRAW LIGATURE.—A. J. Ochsner has now performed 156 gastro-enterostomies or entero-enterostomies by this method. He did not use it until he had seen McGraw demonstrate it upon a dog.

He has come to the following conclusions:

1. Anastomosis with the McGraw elastic ligature can be accomplished in a satisfactory way (a) between stomach and intestines, and (b) between intestine and intestine.
2. The opening can be made any length.
3. It can be made without carrying infectious material from the lining of the stomach or intestine to the peritoneum.
4. It can be performed quickly.
5. It requires no special skill or ingenuity.
6. The patient shows very little, if any, shock after the operation.
7. The patients are relatively very free from pain and can usually sit up in bed with the aid of a head rest a few hours after operation.
8. The method should not be used in making a pyloroplasty.
9. It should not be used in making a cholecystenterostomy.

The author has formulated the method in the following ten, short, concise steps:

1. A round rubber cord 2 mm. in diameter, made of the best material, should be used.
2. A posterior row of Lembert sutures should be applied.
3. A long straight needle, armed with the rubber ligature, is passed into the lumen of the intestine and out again at the desired distance, from 5 to 10 cm. away from the point of introduction.
4. While an assistant holds the intestine the surgeon stretches the rubber in the needle, and when quite thin draws it rapidly through the intestine.
5. The same step is repeated through the stomach.

6. A strong silk ligature is placed across and underneath the rubber ligature between the latter and the point where the stomach and the intestine come together.

7. A single tie is made in the rubber ligature after the latter has been drawn very tightly.

8. The silk ligature is passed around the ends of the rubber ligature where they cross, and tied securely three times.

9. The ends of the latter are released and cut off, being held by the silk ligature.

10. The Lembert suture is continued around in front until the point of its beginning is reached, where it will be tied.

11. Care must be exercised to prevent tying the rubber ligature too far backward and thus getting behind the posterior row of Lembert sutures.

124 of the author's cases were operated at the Augustava Hospital, and he has had these carefully tabulated and includes this tabulation in his article.

In the discussion of the paper the principal objection found against this method was the interference with early nutrition through the stomach. Dr. Ochsner believes there is some reason for fearing this, but has fed patients who were very weak and in whom the pylorus was not completely occluded, through the stomach within 24 hours.—*The Journal of the American Medical Association*, Oct. 21, 1905.

J. D. ELLIOTT, M. D.

ETHYL CHLORIDE IN OPHTHALMIC SURGERY.—At the Birmingham and Midland Counties Eye Hospital ethyl chlorid has been used as a general anesthetic chiefly during the last two years, and has largely taken the place of gas and to some extent, that of chloroform. During the year 1903, it was administered on sixty occasions as a general anesthetic, mostly to children.

During the year 1904, the administrations of ethyl chlorid were ninety-one, or 50 per cent. increase on the previous year. The author anticipates that ethyl chlorid will now entirely replace gas and that its use will steadily increase. As a general anesthetic he had administered it on over one hundred occasions for short operations in eye and general surgery, and with but one exception he has never experienced any difficulties. In this instance, the patient was a male, 67 years of age, with hypertrophied heart and interstitial nephritis.—*D. Beaston Hird, The Ophthalmoscope*.

WILLIAM SPENCER, M. D.

RETINITIS PUNCTATA ALBESCENS.—To the literature of this very unusual condition, the author adds the clinical histories of two cases. These cases, he states, come to affirm once more the existence of retinitis punctata albescens as a separate disease of the retina, just as Fuchs has described it in its principal feature. In regard to the pathological anatomy of this form of retinitis, Pascheff says, we know nothing positive. He refers to Gayet and Fuchs who localize the alterations in the pigmented retinal epithelium which disappears in the region of the spots. In this way they consider them as of atrophic nature and identify the disease with retinitis pigmentosa. Another hypothesis is that which admits of the external re-

tinal layer, which view is upheld by the microscope studies of Wedl & Bock, who consider the condition to be nothing else but an edema of the retina. Pascheff is more inclined to accept a congenital atrophic process of the pigmented retinal epithelium, than a fresh inflammatory process.—*C. Pascheff, Bulgaria, Ophthalmic Review.*

WILLIAM SPENCER, M. D.

ALBUMINURIC RETINITIS IN A CASE OF PARENCHYMATOUS NEPHRITIS IN A CHILD.—In a recent paper having the above title, the author states that he has seen and read of cases of neuro-retinitis arising in chronic interstitial nephritis in children, and there is no reason to suppose that the complication occurs more or less frequently than in adults suffering from this variety of renal disease. Chronic interstitial nephritis in children is a rare affection, but by no means so rare as is commonly supposed. He is not aware that neuro-retinitis has been recorded as arising in association with "large white" kidney in children, although the fact that such is not mentioned in literature is due rather to want of observation than to a knowledge of fundus changes in the young in this condition. The case he reports was that of a girl 10 years of age, who complained of sickness, headache, and pain in the stomach and whose urine showed evidence of parenchymatous nephritis. The history does not state whether or not the kidney condition followed one of the infectious fevers. It was also discovered that the patient had neuro-retinitis in both eyes. The left optic nerve was swollen and enlarged. The vessels were partially buried in exudation, they bent as they crossed the edge of the disk, and beyond it they were partially obscured by a whitish haze. Just below the optic disk was a small hemorrhage. Radiating from the edge of the disk to the macula was an irregular-shaped area of paper-whiteness, underlying the retinal vessels. It had a defined edge and somewhat striated appearance. At the macula, in addition, were a number of minute yellowish-white dots. Above the paper-white area were a large number of small yellowish-white, well-defined spots of varying size underlying the retinal vessels. The right optic disk was in much the same condition as the left, showing vessels partially buried in exudation and small hemorrhages. At the macula and between it and the margin of the optic disk, radiating fanwise towards it, were a number of paper-white patches underlying the retinal vessels. At the macula, some were well-defined, others were not so. The vessels on the yellow spot side presented along their course a number of patches of various shapes, small in size, below the retinal vessels, yellowish-white in color and defined. The nephritic condition progressed rapidly and the patient died.—*D. George Carpenter, The Ophthalmoscope.*

WILLIAM SPENCER, M. D.

FIVE CASES OF FAMILY DEGENERATION OF THE CORNEA.—In commenting upon this series, the authors remark that this family presented in three generations, seven instances of a slowly progressive and bilateral degeneration of the cornea, leading to the serious impairment of sight after lasting several years. As a rule, the condition was not accompanied by very prominent symptoms of inflammation. Such as were present in two of the cases were probably the expression of tiny erosions of the corneal

epithelium rendered particularly vulnerable by degenerative changes. The ages of the five patients examined—12, 15, 22, 24 and 28 respectively—allow one to study the different stages in the evolution of a very singular malady. In no instance was any evidence of syphilis forthcoming. Indeed to evoke syphilis as a cause would be to imply what has never been scientifically proved, viz., the transmission of that disease to the third generation. Two of the patients belonging to the third generation looked unhealthy, but the thyroid gland, the state of which was investigated in every case, showed no obvious changes. No consanguinity of parents existed, either in the first or second generation. The authors suggest that the conditions known as "Nodular Keratitis" and "Lattice-like Keratitis," be included under the general term, "family degeneration of the cornea."—*Drs. R. W. Doyne and S. Stephenson, Ophthalmoscope.*

WILLIAM SPENCER, M. D.

INFLAMMATORY CONDITIONS OF THE APPENDIX ACCIDENTALLY BROUGHT TO LIGHT IN PELVIC OPERATIONS.—Hunter, Robb, (Cleveland) says in the present paper an attempt has been made to deal not with the broad question of appendicitis, but rather with the lesions that are discovered accidentally when the abdomen has been opened for some pelvic condition, especially one affecting the tubes and ovaries. His observations are based upon a series of 370 cases, and his conclusions are: In a large number—323 out of 370—of pelvic cases no inflammatory changes in the appendix are found even microscopically. 2. When we find a normal appendix in conjunction with disease of the pelvic organs, it is improbable that the latter condition has been brought about by a perforation of the appendix which had afterwards healed. 3. On the other hand, an old periappendicitis and adhesions may often be looked upon as the result of a septic infection, originating in and spreading from the organs of generation. 4. An appendix which looks abnormal microscopically does not always show inflammatory changes on microscopic examination. 5. Nevertheless, when the removal of the appendix adds very little to the gravity of the abdominal operation, for the benefit of the patient, it should be taken away. 6. In his series of 370 cases there were four deaths, but a careful analysis goes to show that the fatality could in no instance be attributed to the removal of the appendix.—*Amer. Jr. Obs.* Vol. LII, 233.

THEODORE J. GRAMM, M. D.

VENESECTION IN ECLAMPSIA.—Kirkley (Toledo) in an article on eclampsia says: "While venesection as a prophylactic is necessarily of limited application, still in appropriate cases its value cannot be overestimated. Should these means of relief fail, evacuation of the uterus should be seriously considered. When toxemia appears early in pregnancy, buttermilk to the exclusion of almost everything else is the best diet." He cites a case in which venesection was used as a prophylactic measure when eclampsia threatened. Relief was immediate. Albumin, no doubt contained in the urine many weeks, constantly diminished; excretion of urea became abundant. The patient went to full term and was safely delivered. Not a single troublesome symptom appeared after venesection. Salines and diuretics were given as necessary, and, of course, may have

contributed to the favorable outcome. In another case venesection, no doubt, prevented eclampsia. Most of the premonitory symptoms were present when a vein was opened and 35 to 40 ounces of blood withdrawn. A softer pulse was the only sign of loss of blood. The next day the uremic symptoms had disappeared, the urine became more abundant. Three weeks later the uremic symptoms again appeared, and were removed by the same treatment. Under proper conditions, no remedy can be compared with venesection, its special recommendation being its promptness in the elimination of the toxins, thus rendering the system more susceptible to the action of other remedies.—*Amer. Jr. Obs.* Vol. LII, 350.

THEODORE J. GRAMM, M. D.

SCOPOLAMIN-MORPHIA NARCOSIS.—Ziffer has published the experience in Buda Pesth with this new method of inducing anæsthesia. After reviewing the well known disadvantages and dangers which attend the commonly used anæsthetics, he says this new combination promises to become a valuable narcotic and anæsthetic in surgery and gynecology, and, as has been affirmed of all new remedies, he says it is quite harmless if certain precautions are used. In the cases reported the scopolamin-morphia injections have been combined with the inhalation of small quantities of chloroform; and later, when they saw no evil effects following, they used the injections alone, especially when chloroform was contraindicated. For deep narcosis they have injected the usual quantities used, namely of scopolamin hydrobromate 5 millegrams (0.005), morphia muriate 10 centigrams (0.10), in distilled water 10 grams. The first injection was administered 2 1-4 hours, the second 1 1-4 hours, the third 1-4 hour before the operation. After the third injection the patient was usually in a deep sleep, but still responded to irritation. In such cases chloroform was usually given by inhalation, in quantities of 2 to 3 grams, which induced deep narcosis. This condition was maintained by the occasional use of a few drops of chloroform on the inhaler, the latter being removed in one or two minutes. After that 1-4 to 1 1-2 hours would elapse without necessity for a further repetition of the chloroform. If the corneal reflex reappeared, or if the patient began to yawn or to stretch himself 10 or 15 drops of chloroform again induced complete narcosis. If it appeared that the narcosis was well borne and relatively large quantities of chloroform were required, a further injection was given, which brought about a further saving of chloroform.

In the beginning of the narcosis the pulse was very rapid, 120 to 140, full and strong; after giving chloroform it returned to 80 to 100 and rarely exceeded 120. The respirations on the other hand, diminished greatly in frequency but were full and deep. The pupils remained of medium size and reacted slowly or not at all. The relaxation of the tongue was usually met by fixing the lower jaw. In two cases the mouth had to be opened, and the tongue drawn forward. The patient was usually quiet during the narcosis, and the stage of excitation absent. After the operation the patient generally slept for one to four hours. Vomiting was rare; in two cases showing such a tendency a rather large quantity of chloroform had been used. On awakening the patients felt good, complained of no pain, and were able to take liquid nourishment a few hours later. The author has tabulated a number of advantages which this combination triple nar-

cotic combination possesses, and these may be comprehensively stated as being those associated with the administration of the minimal dose of chloroform. The anæsthetist must, however, give attention to two points. Firstly, the condition of the pupil during this form of narcosis does not possess the same value as an index of the depth of the narcosis, as during the use of the usual anæsthetics. The pupil is usually of medium size; if contracted or dilated, the condition is caused either by the morphia or the scopolamin. But, says Ziffer, we do not need such an indicator since in the combined narcosis an overdose of chloroform is excluded, since only minimal quantities are given. The second important point is the fact that the narcosis does not cease when the operation is ended, but the patient remains in a profound sleep for 1-2 to one hour longer. Therefore the patient dare not be left alone, for it could happen that the tongue fall backward and the patient suffocate. In such case the tongue is either drawn forward, or the lower jaw fixed. The author has several times observed a subnormal temperature continue after this combined narcosis, followed by a rise of temperature to 101° without any cause depending upon the condition of the wound. With proper precautions Ziffer says there are no absolute contraindications. As relative contraindications, however, if within 10 minutes after the second or third injections the pulse becomes very frequent, 150 or more, and it loses tension, and if respiration becomes very slow and superficial, he advises to withhold further injections and rather use chloroform, of which a very small quantity will be required. He also advises to use chloroform alone, if three or four injections of the scopolamin compound are not sufficient. In using this narcotizing combination it is absolutely necessary that the compound shall be freshly prepared, otherwise morphia hypernarcosis will be induced.—*Monatsschr. f. Geb. u. Gyn.* Vol. XXI, 20.

THEODORE J. GRAMM, M. D.

THE SERIOUSNESS OF GONORRHOEA in women is constantly being dwelt upon by authors. Thus Fitch says almost all pelvic diseases in women are caused by gonorrhœa. Of 1,000 men there are about 800 infected with gonococci, 90% of whom are uncured. The author even denies the curability of gonorrhœa. Not only metritis, parametritis, salpingitis and oophoritis are caused by latent gonorrhœa, but also blenorrhœa neonatorum. The peritoneum and the bladder are relatively immune against the gonococci. Other authors have, however, shown that these organs, in addition to the joints and pleura may be affected.—*Frommel's Jahresbericht*, XVI, 90.

THEODORE J. GRAMM, M. D.

MULTIPLE PRIMARY CARCINOMA OF THE VULVA.—Fromme (Halle) describes the case of a 65 year old woman suffering from this condition in its initial stage, and who for one-half year suffered from pruritus. The case suggests that elderly women with pruritus or leukokeratosis should be kept under observation, since malignant degeneration may supervene.—*Beitrage z. Beg. u. Gyn.* Vol. IX, 382.

THEODORE J. GRAMM, M. D.

HYPERTRICHOSIS WITH CHANGES IN THE FEMALE GENITAL ORGANS.—Alberti (Potsdam) adds a contribution to the somewhat desultory observations of anomalous growth of hair upon the bodies of women in whom there are changes in the genital organs. The case is that of a 23 year old girl who developed a full black beard, and who died from peritonitis following torsion of the pedicle of an ovarian tumor. Until her 20th year the patient was well and showed no abnormal hirsute endowment. At that time, however, the ovarian tumor appeared and with it the abnormality above mentioned, in addition to a deepening of the voice.—*Beitrag z. Geb. u. Gyn.* Vol. IX, 339.

THEODORE J. GRAMM, M. D.

POST-OPERATIVE ILEUS.—In a comprehensive article on this subject, Baisch discusses 23 cases of post operative ileus, in 16 of which the abdomen was again opened. These cases occurred among 1,100 laparotomies, and 900 vaginal operations. Only 5 of the 23 cases died. An interesting historical sketch is given of the attempts to determine the cause of ileus; and of the last point touched upon in the debate, namely the relative merits of moist and dry asepsis, he shows that there is practically no difference in the results. The author points out the difficulties of diagnosis and shows how the symptoms of peritoneal irritation, namely delayed bowel movements and discharge of flatus with belching, vomiting, meteorism, and elevated temperature, further obscure the differential diagnosis between ileus and sepsis. He emphasizes the occurrence of the symptoms of ileus after the first week, with insufficient bowel movements during the first days. He discusses the difference of opinions as to the cause, and states his view that the main factors to be avoided are permitting surfaces to remain uncovered by peritoneum, and the presence of blood in the peritoneal cavity. In reopening the abdomen, in some instances he emptied the bowel by means of a trochar, which facilitated replacing the bowels and re-established their normal tone. The character of the pulse is his indication whether the patient can endure a second operation.—*Beitrag z. Gbe. u. Gyn.* Vol. IX, 437.

THEODORE J. GRAMM, M. D.

SYPHILIS OF THE PLACENTA.—Queirel says the macroscopic sign of the syphilitic placenta is its size, thickness and weight. The weight of the placenta in proportion to that of the fetus is usually as 1 to 4, while in syphilis the proportion is as 1 to 3 or even to 2, or even heavier than the fetus. The changes upon which this increase of volume depends are of specific character and consist of true cirrhosis. Microscopically there exist endarteritis, periarteritis, proliferation of chorionic epithelium in both layers, and hyperplasia of the connective tissue elements. Even the umbilical vein is demonstrably diseased, thickened, and infiltrated.

Although the changes in the placenta in albuminuria have a certain similarity to those of syphilis, yet the changes in both diseases must be strictly differentiated. In albuminuria there are changes similar to those in retinitis albuminurica, hemorrhagic infarcts of recent and remote origin, with degenerated villi.

The harm to the fetus from syphilis disease of the placenta is self-evident, and is more pronounced the earlier the placenta is affected by syphilis.—*Abstr. in Zentralbl. f. Gyn.* 1905, 935.

THEODORE J. GRAMM, M. D.

HYPEREMESIS GRAVIDARUM.—Uhle gives an interesting account of a case pregnant in the fourth month, which had resisted all the usually applied means of treatment. The patient became emaciated, haggard, vomited twelve or fifteen times in twenty-four hours and was confined to bed. Rectal alimentation had also failed. Being sent for to induce abortion, he determined first to try a treatment which had never failed him previously, consisting of washing out the stomach, ice upon the epigastrium, small doses of morphia, and rectal alimentation. In this case, however, the treatment was not successful permanently, although for a few days the patient was better. On internal examination it was then found that the uterus was distinctly anteflexed, and more or less imprisoned in the pelvis. A colpeurynter was then placed in the vagina and by its inflation the position of the uterus was corrected and the flexion removed. At first this treatment caused pain and had to be discontinued; but a second application of the instrument effected an almost immediate relief of the dangerous symptoms.—*Zentralbl. f. Gyn.* 1905, 741.

THEODORE J. GRAMM, M. D.

THE FUNCTION OF THE CORPUS LUTEUM.—From some experiments made to examine Born's view of this subject, Frankel believes that the presence or absence of the corpus luteum influences the most important processes occurring in the genital sphere. He thinks the corpus luteum should be regarded as a gland having an internal secretion; in the human race it is newly formed every four weeks, in animals at different intervals, and has always the same function in cyclic manner to induce a nutritive impulse to the uterus so that the latter will not return to an infantile state or hasten to senile changes, and also to prepare the mucous membrane for the reception of the impregnated ovum. The corpus luteum therefore influences the growth of the uterus and the occurrence of menstruation, the latter remaining absent the next time if the corpus luteum is destroyed. It also affects the imbedding of the ovum in the mucous membrane, which does not result even after impregnation if the corpus luteum is destroyed. When the ovum becomes impregnated the corpus luteum retains its function for some time to induce an increased amount of nutrition of the uterus necessary for the imbedding and development of the ovum. If impregnation does not occur, the hyperaemia induced leads to menstruation and the corpus luteum undergoes involution. There is no difference between the true and false corpus luteum. The cause of menstruation resides in the secretory activity of the corpus luteum and not in the pressure of the growing follicle upon the ovarian nerves. This activity induces the cyclic monthly hyperaemia of the uterus which either leads to pregnancy or to menstruation. For the treatment of amenorrhœa the substance of the entire ovary is not necessary, but only and especially that of the corpus luteum, and the author has used this successfully for that purpose.—*Frommel's Jahresbericht XVI*, 643.

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.

LACK OF REACTION.—Philip Rice, M. D., in *Pacific Coast Journal of Homœopathy*, calls attention to several remedies which he has found especially useful when there was "lack of reaction." There is the flavor of novelty about his article.

Psorinum.—During the period of convalescence after typhoid fever, when the temperature refuses to stay down to the normal point, the bowels remaining loose, the appetite does not return, sleep is poor; the slightest exertion causes sweating and exhaustion; and there is manifested a morose, depressed, hopeless mental state. A similar condition may obtain after labor; but here the lochia is profuse and offensive and long lasting. The milk is scanty and of poor quality, and the woman grows pale and sickly. In such states, the author finds help in the administration of psorinum. Also in chronic disease, when the apparently indicated remedy produces merely temporary improvement. He sometimes uses in place of psorinum, *Ambra grisea*. When the latter remedy is needed, as a reaction exciter, there are always nervous symptoms. Mental and physical exhaustion with trembling. The author mentions this as a remedy too often neglected in typhoid fever and other low febrile states. The patient being prostrated and emaciated entirely out of proportion to the stage of the disease. Mentally he is helpless and unable to think, or to grasp the simplest thought, unless it be repeated several times. There is a dull, stupid, almost idiotic expression. Unable to sleep on account of distorted images and faces which crowd upon the fancy the moment the eyes are closed. Delirium is present, but it is mild in type. The patient is mentally excitable, but physically prostrated. The temperature runs high, and is usually accompanied by profuse sweating. Every physical effort is attended by marked trembling.

The author also mentions *Sulphur*, differentiating it from Psorinum, first by contrasting the slowness, sluggishness and phlegmatic disposition of the sulphur patient, with the nervous restlessness and irritability of the psorinum individual. He believes that sulphur is more apt to be indicated for lack of reaction *during* an acute disease and psorinum *after* the disease has passed. The modality as to temperature is different in the two remedies. Psorinum is cold and aggravated by everything cold. Sulphur is hot in general; or, in parts; wishes the covers off, or the doors and windows open, or the hot and burning parts exposed to the air.

Opium.—Absence of striking symptoms in a condition that naturally has many symptoms, and painlessness, are peculiar and characteristic of the

opium picture. The patient is drowsy, dull, even comatose; but, when roused and asked whether he suffers pain or distress, he will answer—"no." There exists a paralytic condition of the whole cerebro-spinal nervous system; hence a lack of sensation and a lack of reaction. The carefully selected remedy sometimes fails to make an impression under such circumstances.

Lauracerasus.—This remedy should be thought of when, in chest affections, pneumonia, bronchitis; or, in functional heart troubles, there is a lack of natural reaction. There is no response to remedies, even when the symptoms seem perfectly covered. Or what is much worse; the patient while taking, what was thought to be the proper remedy for him, suddenly grows worse with evidences of sinking. The pulse becomes weak, irregular, almost imperceptible. The respiration becomes labored and there is rattling of mucus in the chest, or other signs of threatening paralysis of the lungs. In such a condition as this, no amount of stimulation will equal this remedy in effects.

Carbo vegetabilis.—What lauracerasus is to chest affections, this remedy is to abdominal diseases, be they acute or chronic. In acute diseases, the symptoms calling for carbo, are: Sudden collapse with cold sweat, cold breath and cold extremities. Hippocratic countenance; the stool is profuse, light-colored or bloody; horribly offensive. Whenever there is lack of reaction and the symptoms are difficult to obtain and indistinct, carbo becomes the needed remedy. The author says also that when *Nux vomica* has been prescribed for the evil effects of catharsis and no good results have followed; carbo vegetabilis invariably is the curative remedy. The weakness of nerve force following over-stimulation is removed by carbo.

Capsicum.—When acute inflammatory conditions tend to suppuration and the usual inflammatory remedies have little or no effect, give capsicum. Indicated in lazy, phlegmatic individuals in whom medicines have little effect.

ATROPINE AND BELLADONNA IN GASTRIC AFFECTIONS.—It is interesting to observe the potency of the similar remedy, in minute dose, in certain gastric affections dependent upon a condition usually requiring more than the mere internal remedy. Thus we lately had a well marked case of hyperchlorhydria to treat. The man, aged 45 years, gave the usual hyperacid reactions, and suffered from constant acid risings. He was a stout, plethoric, red-faced man. *Four hours after* the ingestion of a proper meal, he suffered from the sharpest kind of pains which were apparently within the stomach and also in the transverse colon. Eating relieved these, to some extent. The epigastric sensitiveness was marked. (We must have this in the Belladonna picture.) This patient declared that he ate, not because he had appetite for food, but to relieve gastric distress. It is a clinical fact that either Atropine or Belladonna will help such cases. Atropine 3x. trituration, one grain every fourth hour, soon relieved. Then Belladonna 3x. was given, and finally Belladonna 30th. It required but a few weeks to cure these troublesome complaints; and, they had existed for a long time. The variations in potency seems necessary, in such cases, if the progress towards recovery is not continuous. This is another clinical fact. It is usually necessary to differentiate Belladonna, *Anacardium*,

Chelidonium and other drugs in this form of gastric difficulty; but, really one should devote as much attention to the selection of the proper remedy as to the general directions for diet, change of habits and mechanical adjuvants.

THE OVER-STIMULATION OF THE HEART IN PNEUMONIA.—The statement of Dr. A. K. Crawford, in *Clinique*, that we should not over-stimulate the heart during the treatment of our pneumonia cases, is decidedly opposite to the teachings of many authorities. Indeed it would seem as if many practitioners had the one thought in mind:—the toning up of cardiac action. Dr. Crawford, in a striking manner, calls attention to the fact that fatal cases or dangerous symptoms in those that survive, may be traced, not to cardiac failure, nor to the choking up of 300,000,000 air cells; but, rather to the presence of toxins in the blood. This author regards it as folly to stimulate the heart, and gives many excellent reasons for his position. We are firmly convinced that the medical profession has not learned all that there is to know regarding the treatment of pneumonia. We are going to have a better method some day than the plan now in vogue. The homœopathic school are ahead of others; but, still we have no cause to boast of our results in this particular disease.

THE PLACE FOR BAPTISIA IN TYPHOID CASES.—*Baptisia tinctoria*, the wild indigo of America, has gained quite some reputation as a remedy suitable for the early manifestations of the typhoid infection. You may read in our literature, many references to its power of aborting the entire typhoid disease, if its administration has been commenced early enough. One should take such statements with the usual grain of salt, because it is possible to confuse the typhoid states of various febrile affections with true typhoid infection; and such confusion produces errors in diagnosis, and so may lead to faulty premises. We have never thought that the true *Baptisia* type of typhoid disease was one that could easily be aborted. It is too deep a toxæmia. *Baptisia*, unquestionably, has the power of developing in the human system, a fever closely resembling typhoid. It acts also upon the intestinal mucous membranes and upon the intestinal glands producing at least congestion and catarrhal inflammation. Its symptomatic resemblance to typhoid is not simply a superficial resemblance; it has a pathological basis of similarity as well. It produces a profound depression; and, the tendency towards blood disorganization is very apparent. There is nothing in its picture that suggests such remedies as *Aconite* nor *Belladonna* nor *Gelsemium*. It is a low, adynamic, prostrating fever. The *Baptisia* patient is apt to go to bed early because he feels so sick and so weak all over. He feels sore and bruised. Those portions of the body upon which he lies, become sore and feel bruised. Therefore in the provings we read:—"Restless moving of the body about the bed, to find a softer place upon which to lie; or an easier position." "The bed feels hard to the patient."

It would therefore be wrong to get the impression that simple restlessness of mind or body or both, expresses the *Baptisia* state as it might the *Aconite* or *Rhus* or the *Arsenic* condition. You must explain the *Baptisia* restlessness as we have just outlined, or you may go a step further and say that sometimes later on in the disease, the *Baptisia* patient moves

restlessly on account of a peculiar *mental state*. The mind becomes clouded quite early, and a delirium occurs, during which the patient fancies "the body is broken into several pieces." He moves in an effort to readjust the parts. This is a peculiar state, but it doubtless occurs in some cases. Farther along, the delirium increases and we have the more toxic Baptisia condition. The patient becomes very stupid, falls asleep while talking, awakens confused and unable to talk coherently. He lies in one position, and mutters in a low tone, his face is dull and expressionless. The face may be darkly flushed, with dull, injected eyes and half-closed eyelids. You may say that he looks heavy and besotted; and, the dropped lower jaw intensifies this impression.

The tongue is an index to the state of the mucous surfaces. It is dry, already beginning to look brown, swollen. He cannot articulate clearly until the tongue has been moistened with water. The gums are covered, along the edges of the teeth, with dark sordes. The breath is *offensive*. This offensiveness of the patient, is often the first symptom that suggests Baptisia in the earlier stages of the typhoid. Occasionally, the gums ooze a dark, fluid blood, and they may ulcerate if the toilet of the mouth is not carefully attended to. It seems to us peculiar that a careful prescriber of homœopathic medicaments will sometimes allow mouth washes of highly medicinal character; when the simple, non-medicinal wash of alcohol, glycerine and tepid water, is just as effective and surely less disturbing to the action of the chosen homœopathic remedy. The tongue trembles as it is slowly protruded. This is from weakness. In all Baptisia cases, the intestinal canal is much disturbed. At first, some soreness in the right iliac fossa, then an occasional yellow, watery stool; and, later a darker, very offensive diarrhœa. Rumbling of gas may be noted, but the higher grades of tympanitic distension are not so characteristic of Baptisia as of some other remedies. The tenderness of the Baptisia abdomen, is not a good sign. It is usual for such a picture as has been thus superficially outlined, to be accompanied by a high temperature. The intestinal lesions are active, the dangers of abdominal complications are far greater than in the clinical pictures calling for such remedies as Bryonia and Gelsemium. It has seemed as if Baptisia was one of our remedies that could reduce high temperature associated with its characteristic symptom picture. Baptisia is a remedy that acts well in low dilution or even in tincture; but, if one truly desires its best effects in typhoid, he must find them in potencies beginning with the 6th and going upwards. The administration of Baptisia tincture to a patient, simply because we believe that he is going to have typhoid fever, and from an impression that the remedy has the power of aborting that disease; is one of the ridiculous things in therapeutics. And there are others.

CLYSTERS OF COMMON SALT SOLUTION IN DIPHTHERIA.—Dr. A. Scholta, of Frieberg, translated in *Recorder*, states that he has observed that diphtheritic exudations which otherwise pass through a regular course from the time of their origin up to the day of their evanescence, turned yellow on their borders and were cast off before the usual time of their disappearance. He further observed that such effects were the results of clysters of a weak solution of common salt. From the time of this observation,

the doctor has treated all his diphtheritic cases with weak solutions of salt injected as a clyster. One tablespoonful was used every three to four hours at first; and, later, every six hours. The earlier injections were of a strength of 0.7 per cent. to 0.9 per cent. These were subsequently found to be too strong and solutions 0.3 to 0.4 per cent. were substituted. This observer has had a large experience in several severe epidemics, and speaks feelingly of his previous horror of the dread disease; but, since he has been using the salt clysters, he says that diphtheria has lost many of its terrors for him. The inflammatory process is checked within forty-eight hours and the membranes melt away and are cast off entirely within two days more. In addition to this adjuvant treatment, the author also uses salt solution as a gargle, vapor baths and packing in wet sheets. He does not continue the clysters longer than three or four days, for fear that they might produce weakness of the heart. The author hopes that physicians will try this adjuvant with their internal remedies in diphtheria. Dr. Scholta is inclined to think that the virtues of antitoxin may be ascribed to the salt in the horse serum.

TONSILITIS:—ACTEA RACEMOSA.—Dr. Chas. B. Gilbert, in October *American Physician*, relates the history of a woman, aged 28 years, tall, thin and dark, who had been subject to attacks of tonsilitis since childhood. She had at least fifty attacks, all ending in suppuration. The doctor was called to this patient and found her unable to open the mouth sufficiently to enable him to see the tonsils. The right tonsil was the seat of a sharp, sticking pain, and was evidently much inflamed. There was one feature of this attack which attracted his attention, although not a usual or necessary accompaniment of tonsillar inflammations. It was a severe pain from the seventh cervical vertebra to the top of the head and back of the eyes. He recognized this as the unusual and most striking feature of the attack, and prescribed an unusual remedy, the *Actea Racemosa*. We do not recall ever having heard of this remedy being used in quinsy, but nevertheless it acted in a striking manner. The swelling and pain rapidly disappeared and for the first time in the life of the patient, her tonsils did not suppurate. It would seem as if this was an example of prescribing for the patient and not for the disease. We have every ground for a belief that this is the proper way to prescribe homœopathic remedies.

RELIEF OF CARDIOPATHIC SYMPTOMS.—Dr. Marc Jousset reports in *L'Art Medical*, that Dr. Vaquez has already shown that *chlorated polyuria* is the means by which the *cardiopathic symptoms* are relieved. Rest in bed with dechloridization of the food, suffices sometimes to bring about the clearing up, but this is rare. Dechlorinated alimentation is preferable to a milk regime, which makes necessary the absorption of from '3 to 5 grm of salt a day.

Dr. Vaquez recommends the *dechlorinated regimen*, with the momentary employment of *Digitalis*, followed by a more prolonged use of *Theobromine*, to combat the small and great asystolic attacks of mitral or aortic lesions with feeble arterial tension. On the other hand, if there exists arterial hypertension and renal sclerosis, *Theobromine* with small doses of

Digitalis becomes the leading remedy. As a preventive we will do well by giving a course of *Digitalis*, with dechloridization of the food for three or four days; the following week administer *Theobromine*, 1 grm. 50 to 2 grm., with slight chlorinated regimen.—(Session of 28th of July.)

E. FORNIAS, M. D.

He has experimented with this medicine in diverse varieties of nephritis, and found out that it was principally efficacious in *infectious nephritis*, such as that following scarlatina, grippe, or erysipelas. He asserts that *tuberculin* is especially indicated in those predisposed to tuberculosis or catarrhal pneumonia, and that in the discussion about nephritis in the Société Française d'Homœopathie, Dr. Jousset confirmed the beneficial influence of tuberculin in post-scarlatinal nephritis. In *chronic nephritis*, this medicine is less effectual. He thinks, however, that it may render good service in Bright's Disease associated with tuberculosis or with pulmonary hepatization.

He considers *Arsenicum iodatum* one of the most important remedies for *chronic albuminuria*. It is undoubtedly homœopathic. In fact, in toxic doses, it disorganizes completely the kidneys, and we find in the urine, albumin and divers organic elements of the renal gland. In small doses it acts as a reconstructant of the kidneys, and under its influence the albumin, even in serious cases, diminishes in a constant and notable manner. It is especially efficacious in the lower triturations (2x or 3x). The high dilutions seem to have a less certain and less rapid action. It is particularly indicated in chronic nephritis with anæmia, in parenchymatous nephritis and in the interstitial nephritis of arterio-sclerosis.—*Revue Homœopathique Française*.

E. FORNIAS, M. D.

WHY DO PEOPLE DIE FROM PNEUMONIA?—Dr. John P. Sutherland claims that it is the toxemia that forms the grave danger in pneumonia; and, that the free and unopposed elimination of waste products and toxins *via* the kidneys should be our objective point in treatment.—*N. E. Med. Gazette*.

TREATMENT OF RHEUMATIC GOUT.—Both Dr. J. Teissier of the Faculty of Lyon and Dr. Roque of the same institution, contributed, among other subjects, with an article on *Rheumatic Gout* in the last great work of Medicine and Therapeutics by Profs. Bouardel and Gilbert of Paris. They assert that the dyscrasia governs the pathogenesis of rheumatic gout: it is therefore against the constitutional predispositions and tendencies that we must contend. The dietetic prescriptions hold in consequence the first rank. One should avoid a strong nitrogenous food and the use of alcoholic drinks. Alcohol, which lessens oxidation and tends to lower the central temperature, and which besides has a direct irritative action on the liver, leads to an increase in the production of uric acid and to an accentuation of the acid dyscrasia, the immediate source of the arthritic manifestations. Moreover, by irritating the kidneys, an excessive partaking of meat, as well as of fermented drinks, provokes the production of glomerular renal lesions, which is a frequent termination of such cases.

This is the reason why wine is contraindicated in the arthritic. All heavy wines with a large per cent. of alcohol, as well as the stimulating wines of Bourgogne should be prescribed. Fermented beverages, as champagne, cider, and Bavarian beers, must be interdicted. As ordinary beverage, allow, either a little red wine highly diluted with water, or a third of a glass of those dark beers, containing little alcohol (stout), and which by the torrefaction of the barley becomes less exciting to the kidneys. They should also be diluted with water, or better still, with a mild alkaline water, such as Evian, Val-Saint-Jean, Pougues. Forbid the excessive use of dark meats, or of those having a flavor of game, as well as acid food (tomatoes, sorrel, etc.) Approve the habitual usage of milk and of green vegetables, chopped and well cooked. Prohibit the condiments, but allow the use of lemon, which systematically given, in large quantities, is recommended, especially by the English, as a powerful agent against the uric acid diathesis. Its action is not yet well known, but probably they act as the citrates or alkaline carbonates do, which by facilitating the production of urated combinations more soluble or more stable, favor the elimination of the uric acid and hinder its precipitation at the level of the joints. But to obtain such desirable results the number of lemons needed is too great for many stomachs to tolerate.

In patients where the tendency to interstitial nephritis is already accentuated we should advise milk, eggs, white meats (fresh pork, poultry, etc.), and to dismiss from their meals greasy soups, and sea fish, whose toxic substances or extractives have such baneful influence on the renal process.

The authors of this article consider the *hygiene of the skin* of prime importance, not only to maintain or stir up the regular function of the nutritive acts, but to facilitate the elimination of the waste products of tissue metamorphism. They suggest methodic exercise, short of fatigue, so as not to create new articular manifestations, but if not possible, daily massage should be rigorously prescribed.

As to internal medication they recommend the *alkalines* for the acid dyscrasia, warning the reader, however, not to make a continuous use of them, for they may in this way create a certain degree of anæmia—the *iodides*, to act on the function of the skin or exerting their resolute action; giving the preference to the *iodide of sodium* in order to meet the tendency to arterial hypertension of a good number of patients and to calm the painful phenomena. Quinine, antipyrine, aspirine, etc., are also mentioned.

They wish us to bear in mind the necessity of watching carefully the liver, the kidneys and the aortic bulb, and if necessary, to prescribe appropriate measures to combat cholemia as well as inflammation of the intima or the reflex accidents resulting from the irritation near the cardiac plexus (palpitations, vertigo, gastric troubles, etc.)

Thermal medication is also endorsed.—*Le Mouvement Medical*.

E. FORNIAS, M. D.

BLACK EYE.—Dr. James A. Campbell, in *Clinical Reporter*, recommends that the outer eye be penciled with a mixture of tincture of capsicum, two dr., glycerine, two dr., and flexible collodion, two dr. This removes the ecchymoses very rapidly.

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THE PULSE RATE IN TYPHOID FEVER AND OTHER FEBRILE AFFECTIONS.

BY S. W. SAPPINGTON, M. D., AND C. FRED. RAU, M. D., PHILADELPHIA.

(Read before the W. B. Van Lenneo Club, January 2, 1906.)

MEDICAL statements in the journalistic stage are usually accompanied by references to original authorities. When they first reach the dignity of text-book appearance, they may have attached their primary reference, but oftener we simply find stated the name of the recognized observer of the phenomenon without any mention of the article in which the statement first appeared in full. Finally, such statements reach a stage when they are considered the general property of medical men and are found in stereotyped terms in every text book without any reference at all by name or article to the first or subsequent sources. Common examples of this are the well known leucocytosis in croupous pneumonia and the diminution of urinary chlorides in the same disease.

The pulse rate in typhoid fever receives similar treatment at the hands of many authors. It was long ago recognized that the pulse frequency in uncomplicated typhoid was often disproportionately slow in relation to the temperature rise, and this will be found in variable phraseology in all treatises on typhoid fever, with greater or less emphasis on its diagnostic and prognostic value.

In the last few years, so many supposed medical facts accepted for decades as unquestionably true have been shown to

be with so little foundation that iconoclasm seems to be the order of the day. It occurred to us that the characteristics of the typhoid pulse might also rest on an unsound basis, and that, in any event, a reinvestigation of the subject might revive some practical points which have slipped from notice, or, perhaps, bring out something new. We therefore first briefly reviewed authorities in the matter; we then studied the pulse rate in one hundred cases of typhoid fever, fifty from the Hahnemann Hospital and fifty from the Children's Homœopathic Hospital; these we now compared critically with pulse rates from a number of other febrile affections; finally we made deductions from our observations as a whole.

As a preface to the subject, it is essential to take note of normal pulse rates and standard ratios. We have worked on a basis of a normal pulse rate of 70 in male adults confined to bed and 78 in women under the same conditions. In children and individuals up to the age of 21, we have made our calculations from the following average rates given by Tigerstedt:¹⁸

Age.	Pulse Frequency.	Age.	Pulse Frequency.
0-1	134	10-11	87
1-2	111	11-12	89
2-3	108	12-13	88
3-4	108	13-14	87
4-5	103	14-15	82
5-6	98	15-16	83
6-7	93	16-17	80
7-8	94	17-18	76
8-9	89	18-19	77
9-10	91	19-20	74
		20-21	71

According to Liebermeister,⁷ the pulse rate in adults is increased eight beats for each degree of temperature. Other observers, among whom is Mackenzie,⁹ state that the pulse frequency is increased ten beats for each temperature degree. We believe the eight to one ratio more correct. In infants and children, the adjustment of ratios is very difficult. Monti¹¹ gives the ratio in children under two as 6.6 to 1, and in children over two years of age as 5.5 to 1. Myer Solis-Cohen,¹⁷ in a recent article, disagrees with Monti¹¹ and many other observers on the question of pulse rates in children, and gives the following ratios: 4 to 1 up to two years of age; 7 to 1 in the period from two to five years; 5 to 1 in the period from five to seven years; and 7 to 1 in the period from seven to twelve.

We have found, from figures of our own, an increase of 6.5 beats to 1 degree of temperature a very fair average in children from three to twelve years of age. The higher pulse rate in children as compared with adults is thus seen not to be due to a greater proportional increase of beats with degrees of fever, but to the higher normal pulse frequency the younger the individual. So that finally we have demonstrated the truth of Griffith's ⁵ statement, viz.: "that with high fever all pulse rates at all ages tend to be the same." The exceptions to the above rate and ratios are wide and not infrequent.

In typhoid fever, Osler ¹² states that the increase of pulse rate is not always in proportion to that of the temperature: that this rule may hold good even with high fever: and that the bradycardia of convalescence is more common than after any other acute fever. Dreschfeld ³ gives as average rates for the first week 86 to 100 in adult males, and 100 to 120 in adult females; these figures hold good for the whole course in favorable cases except in children; during the second and third weeks, there is usually some quickening of the pulse, but during convalescence there may be marked slowing; between pulse and temperature, there is no definite relation. Liebermeister, ⁸ quoted by Dreschfeld, ³ found that when the pulse reached a rate of 140 per minute, death occurred in fifty per cent. of cases and when the beats were above 140, the mortality was over eighty per cent. Mackenzie ¹⁰ says that when the general condition of the patient is good, the slow pulse of typhoid is a rather favorable sign. Sahli ¹⁶ mentions that in typhoid fever "the pulse frequency is notoriously moderate as compared with the height of the temperature," a valuable differentiating point from acute miliary tuberculosis and septic infection. Vierordt ¹⁹ states that uncomplicated typhoid presents only a moderate increase of pulse frequency; that a more rapid rate, as 120, has a graver meaning than, for instance, it has in pneumonia. The same authority also finds the typhoid pulse a valuable differentiating feature from that of acute miliary tuberculosis and septicemia as does Sahli; ¹⁶ and he also refers to the fact that a complicating pneumonia in typhoid produces a quickening effect on the pulse. Pepper's ¹³ observations are similar to those already given except that he thinks the pulse may be quite rapid in mild cases with but little elevation of temperature. Goodno ⁴ notes a parallelism between the height

of the temperature and the frequency of the pulse, but remarks on many cases found with pulse but little accelerated although the temperature is high: he further finds that "with the early rise of fever, there is an increase in the frequency of the pulse, the latter reaching 100 to 110 by the close of the first week; during the second week, the pulse creeps up a little; in the third week, the continued fever, increasing debility and cardiac degeneration cause considerable rise in the pulse rate, the latter often reaching 130 to 160; such a great frequency of the pulse must be regarded as of very serious omen, some few cases, however, recovering." Curschmann's² remarks on this subject are quite lengthy and very valuable. He thinks the relative degree of infrequency of the typhoid pulse has not been sufficiently emphasized, as it is of great diagnostic aid. Transitory increases with obvious causes are unimportant. But very different and much more serious are those cases in which from the outset or at the beginning of the fastigium, there is marked frequency. These pursue a severe course. Sudden and persistent accelerations are also very valuable indications of complications, notably peritonitis and hemorrhage. In the very severe cases, particularly those in which death results from the intensity of the infection, the frequency becomes constantly higher. In convalescence, excitability and variations in the rate are common. From a prognostic point of view, the relative slowness of the pulse is of good significance.

In children, Curschmann² agrees with Roger¹⁴ who first observed that the relatively infrequent pulse was absent in young children, but disagrees on the age at which this occurs. Roger¹⁴ found that up to the sixth year, the pulse was relatively rapid, and after that not infrequently slow. Curschmann² only observed the relative infrequency of the pulse between the tenth and fourteenth year. Rotch¹⁵ says the rise in temperature and pulse rate are proportionate. Holt⁶ finds the pulse increased in frequency but not in proportion to other febrile affections. Butler,¹ in an exhaustive review of typhoid fever in children, states that in very young children the pulse runs parallel with the temperature. Wilson²⁰ notes that the pulse in children corresponds in a way to the height of the temperature but exceptions are frequent.

Our first series of fifty cases from the Hahnemann Hospital

are intended to represent typhoid fever in adults. There were two cases at 16 and three at 17 years, but nearly all the others were between the ages of 20 and 30. The pulse rates were first considered from the standpoint of altered ratios in relation to temperature. In this series it was found that during the first week the pulse was disproportionately slow in 37 cases, disproportionately increased in four and normal in its relation to the temperature in 9. In the second week, the figures stood decreased in 26, increased in 11 and normal in 13 cases. In the third week the pulse was decreased in 14, increased in 19 and normal in 11. The fourth showed lowered pulses in five cases, raised pulses in 15 cases and normal proportions in five cases. In the fifth week, the standing was decrease 5, increase 8, and normal 2. In the sixth week, decrease 2, increase 5, and normal two. In the sixth week, decrease two, increase five, and normal one. During convalescence, the pulse ratio to temperature was as follows: Ratio decreased six, ratio increased 20 and normal 21 cases. These figures may deceive one a little from the fact that fewer cases were given to figure on each week inasmuch as some were on the convalescent list by the third week and so on. The actual standing of ratios is thus better seen in the percentage table.

TABLE I
Fifty Cases of Typhoid Fever in Adults

Weeks of Disease		1	2	3	4	5	6	Convalescence
Pulse Ratio	Decreased	74%	52%	31.8 %	20%	23%	25%	12.8%
	Increased	8%	22%	43.2 %	60%	61.6 %	62.5 %	42.5%
	Normal	18%	26%	25%	20%	15.4 %	12.5 %	44.7%
Numbers of cases in various weeks		50	50	44	25 one death	13	8 two deaths	47

Here it will be seen that the percentage of cases in which the pulse was disproportionately slow during the first week is quite large—74 per cent.; that during succeeding weeks up to the fifth week, this percentage steadily decreases, and that this decrease is not due to a loss to the percentage of normal ra-

tios, but, on the other hand, the percentage of increased ratios is the list to receive the benefit of the figures; and it will be seen by a glance at the table that the percentage of increased pulse ratios which is only eight in the first week steadily increase up to and including the sixth week, where it reaches 62.5 per cent. In the convalescent stage, the percentages of normal and increased pulses are nearly equal but the slowed pulse is only represented in 12.8 per cent. of cases. The alterations of pulse proportions were approximately the same for both sexes.

The second series of fifty cases from the Children's Homœopathic Hospital represent typhoid fever in children. The ages varied from three to fourteen years. In the first week the pulse was slower than the fever would indicate in 16 cases, faster in 23 and normal in its relations in 11 cases. In the second week the pulse was decreased in 13, increased in 22 and normal in 13 cases. The third week exhibited 10 decreased pulse rates, 14 increased, and 10 normal pulse rates. The fourth week had one case each for decreased, increased and normal ratios. It will thus be observed that most cases were really convalescent by the fourth week. In convalescence, there were 10 cases with decreased ratios, five with increased ratios, and 23 with normal ratios. All these cases are better shown in the percentage table.

TABLE II
Fifty Cases of Typhoid Fever in Children

Weeks of Disease		1	2	3	4	5	6	Convalescence
Pulse Ratio	Decreased	32%	27.1 %	29.4 %	33.3 %			20.8%
	Increased	46%	45.8 %	41.2 %	33.3 %			31.3%
	Normal	22%	27.1 %	29.4 %	33.3 %			47.9%
Numbers of cases in various weeks		50	48 one death	34	3 one death			48

The percentages of this table differ markedly from those of adults. In the first week, the percentage of decreased ratios is only 16 as compared with 74 in adults. The increased pulse

percentage is, per contra, much higher in children, 23 per cent against 8 per cent in adults. The normal proportions are not very different in both tables. The subsequent variations in the percentages in the various weeks are very different in children and adults, and the list of increased pulses shows a gradual but steady decrease up to convalescence in direct contrast to the increase in adults. There is also a steady increase in the percentage of normal ratios in children up to and including convalescence. There was practically no difference in the pulse changes in males and females.

Returning to the adult series, we note that during the first week, the temperature was very steady on the average between 101.4 and 103.4. The pulses were not very far either side of 100. In 27 cases, the pulse was under 100; in 23, it was 100 or over. In the total 50, there were 33 males and 17 females: 24 of the 33 males exhibited a pulse under 100 during the first week: 14 of the 17 females showed, on the contrary a pulse of 100 or over during the same period. A casual glance at single temperatures and pulse rates during the first week notes the very striking contrast. For instance, the following examples are taken offhand, 103.4 and 84, 103 and 78, 105 and 104, 104.6 and 86. This contrast of figures is not often seen in later period of the disease. During the second week, the temperatures were nearly all lower. This will be understood when it is remarked that the majority of hospital ward cases enter the institution with the fever well developed and are, in reality, further along than the second week of the disease. At this time, though the percentage of cases in which the pulse ratio is increased is greater, yet the pulses are as a whole slower, 33 out of the 50 being under 100 as against 27 in the first week, and only seven out of the 50 failing to show a slowing of the pulse. This apparent contradiction is due to the more marked lowering of the temperature in the second over that of the first week. The temperatures and pulses, in general, were still lower in the third week. During convalescence, all of the remaining forty-seven cases had pulses of 90 or under, except two, both of whom were women. One of these ran 92 and the other 105. Of the convalescent patients, four presented a pulse rate of 60 or under: three of these were males. Of exceptionally high pulses, only one adult case reached 140 and this patient died the same week. Of two

other high frequencies, one averaged 130 one week and the other 125: the first of these was an extremely severe and protracted case and the second one died.

In the series in children, the average temperature of the great majority of cases was between 101 and 102, but it must be remembered that some of these averages were made up from wide fluctuations. The pulses closely averaged 116, the younger children running high. There was little or no difference in the rates between the sexes. In both the second and third weeks, as in adults, temperatures and pulses were lower. Only seven out of the 48 patients of the second week failed to show a less number of pulse beats. During convalescence, the younger children, from three to six years, showed a general tendency to slowing of the pulse, while the older children exhibited slightly increased rates. In but one case was the pulse markedly infrequent, a boy of seven years, whose normal should have been 94 registering 65.

A closer inquiry into individual adult cases gives us the most suggestive information of the study. In the first week, there were four cases in which the pulse ratio was increased. There were nine cases in which the ratio was normal, but we included in these all those three beats either side of the calculated figure. If we look over the course of those individuals with the increased ratio of even one beat or above during their first week, we will note some interesting points. Case No. 3 showed an increase of six beats above the ratio and ran a moderately severe course with four weeks of temperature. Case No. 7 with a rate 11 above the limit was more severely ill with quite a high temperature during the entire four weeks, and a high, excitable pulse even during convalescence. Case No. 8 was raised nine pulse beats and on examination was found to be complicated by a pneumonia. Case No. 18, with 10 beats above the ratio ran an extremely severe course of six weeks and over. Case No. 24 with the rate but one above the limit presented no unusual features except a rapid pulse during convalescence. Case No. 40 was two beats high in the first week, had a hemorrhage in the second week and ran a course of six weeks. In the weeks succeeding the first, we expect the ratio to be reversed or attain normal limits even in mild or typical cases, but the course in those typhoids in which the ratio is *markedly* increased during the succeeding weeks

is notable. In Case No. 4 there was an increase of 10 beats above the proportional in the second week: this case relapsed and ran five weeks. Case No. 12 in the first week was 10 beats slow and in the second week, seven beats slow; but in the third week it reversed to an increase of 10 beats, 12 in the fourth, 31 in the fifth and 26 in the sixth, with death. Autopsy showed phlebitis, septic pneumonia and gangrene. Case No. 16 showed a rather startling increase in the second, third and fourth weeks without any complications or severity of course, but during convalescence the pulse persisted without cause at 90, and as the patient was a female, it was surmised that the rate was normally high. Case No. 19, in the first and second weeks was below the normal ratio, in the third week the rate was increased seven beats over, in the fourth week 17 beats over and in the fifth week 26 beats over. The patient died on the thirty-sixth day. Case No. 26, with rather marked increased ratio during the third and fourth weeks ran a moderately severe course. Case No. 35 was five beats below the limit in the first week and five above in the second, but in the third week the increase was 20, and in the succeeding fourth, fifth and sixth weeks 22, 10 and 25 respectively. In this case a complicating pneumonia was diagnosed in the fourth week, but note the marked increase of pulse rate in the third week before the diagnosis was made. Case No. 46 in the first and second weeks was fairly typical with decreased ratios of 12 and 10 beats: in the third week this suddenly reversed with an increase above limits of 15 beats, to be followed by a still higher rate of 18 in the fourth week when the patient died with hemorrhage. Case No. 50 was the most severe case of typhoid fever we have ever seen recover. In the first week, the decrease was only one beat: in succeeding weeks the increase above the limit was very marked, 21, 26, 24, 28 for the second, third, fourth and fifth weeks respectively. This man ran a course of many weeks complicated in the early stages by a pneumococcic pneumonia and later by superficial abscesses. Even when convalescent and about to leave the hospital, his pulse was 42 beats above normal. There were some cases, though but few, in which the ratio was increased without severe symptoms, but in these the increase was not marked, or the temperature was normal or very nearly so, or there was some obvious cause in nervousness, etc. The cases cited above usu-

ally presented an elevated temperature, not necessarily at all marked, along with the pulse changes. Three cases ran prolonged courses with persistent lowered ratios but none of these compared in severity with those presenting marked increased ratios.

In reviewing the younger children's series, we find the irregularities too great to formulate any rules of diagnosis or prognosis from decrease or increase of ratios. In older children, 12 years and above, the findings approached those of adults.

For the purpose of comparison we looked over the pulse rates in a variety of other febrile affections, about forty in adults and thirty in children. It may be said that we should have omitted diseases in which the lungs, heart or meninges were affected on account of their supposed special effect on the pulse rate, but these are difficult to avoid, and the very ones met clinically for differentiation. Moreover, the pulse rates have often been the opposite of what those who might object would signify.

In adults, we studied cases of tuberculosis, pleurisy, pneumonia, malaria, rheumatic fever and other disorders which will be mentioned singly. It must be remembered that these as a rule do not run a prolonged or regular course as in typhoid. Pneumonia has a fairly regular course but a short one. Tuberculosis has a prolonged course but an irregular one. Out of thirty-six cases of various diseases we were able to collectively tabulate, the pulse ratio was decreased in 18 and increased in 18.

In 10 cases of pulmonary tuberculosis, there were four decreased and six increased pulses. This will not be appreciated at all unless the phase of the tubercular course be taken into account. Tuberculosis is essentially of a very irregular course with exacerbations and ameliorations. When there is an exacerbation, we would expect the pulse rate to run high; when an amelioration, to run proportionately low. An unfavorable course should produce a disproportionately high pulse rate: a favorable course, the reverse. This has been confirmed by examination of these 10 and many other cases. The anxiety of the tuberculosis expert to get his patient's pulse below 100 is well known. Cases entering a general hospital are of the poor class usually in a marked state of exacerbation. Those favor-

ably influenced by the treatment soon began to show a decreased pulse ratio. Those progressing downward showed an increasing reverse, this being most marked in a man with the acute caseous form who died. In a case of tubercular peritonitis with its notorious chronic course, the pulse rate was disproportionately low. In a case of acute miliary tuberculosis, the pulse rate was excessively high. In a case of tuberculous empyema with marked lung involvement and other unfavorable signs, the rate was increased.

In four cases of pleurisy with sero-fibrinous effusion, the pulse ratios for decrease and increase were evenly divided. One of these in which the rate was higher, we were able to subsequently trace and find it had pursued markedly downward course into tuberculosis.

In malaria, the findings were especially interesting. In three out of four cases, the pulse rates were notably low and in the one high case, we find the comment "markedly irregular and pernicious malarial fever." Such temperature and pulse figures as 103 and 76, 104.8 and 86 were not uncommon.

In five rheumatic fevers, the pulse was below limits in two and above in three. In one very severe case in the hospital five months and included in the high list, the pulse ratio in the first week was distinctly lowered but in progressive weeks with marked debility of the patient steadily increased.

Of eight croupous pneumonias, five showed a pulse disproportionately low. Of a general pneumococcic infection with lung abscess diagnosed ante-mortem by blood cultures and confirmed at autopsy, the ratio was quite irregular, at times lower, again increased.

We wished to secure records of cases of appendicitis but most of these only enter the hospital to be immediately operated. We think, however, we are correct in saying that surgeons fear much more the pulse running ahead of the temperature than the reverse. We believe the same to be true of diphtheria. Several other single cases are worthy of mention. A case of pneumococcic empyema, (autopsy), entered the hospital very ill and only lived four days, during which time the pulse averaged 140 though the temperature only ranged between 101 and 102.6. A case of suppurative pylephlebitis with multiple abscesses in the liver lived forty-two days. During the first ten days, the pulse ratio was low, but after that began

to gradually increase until death. A dispensary case seen in a hurry and not examined presented a temperature of 101.6 degrees and a pulse of 135: he was told to come back the next day. He returned in two days with a temperature of 100.8 degrees and a pulse of 150. Examination revealed what was apparently a lobar consolidation with some pleural effusion. He was at once admitted to the hospital. There the temperature several times registered normal though the pulse persisted above 120. He died the same night. A case of meningitis (non-tubercular) was at first suspected of being typhoid and a disproportionately low pulse during the first week still further suggested it. During later weeks, the pulse rate rose but the whole pulse course was not unlike that of typhoid fever. Successive negative Widal's, lumbar puncture and the leucocyte count, however, cleared up the diagnosis. A very interesting case was one diagnosed croupous pneumonia, which, however, gave the Widal reaction and a pulse remarkably slow throughout the course of high temperature. This might have been a typhoid pneumonia.

In twenty-six various diseases in children collectively tabulated the pulse ratios were decreased in seven, increased in 14 and normal in five. The percentages derived from these figures, it will be observed are quite close to the percentages of ratios in the first week in typhoid in children. In six cases of tuberculosis, the pulses were low in two, high in three and normal in one case. In one case of acute miliary tuberculosis the pulse rate was increased as it was also in two very marked cases of tuberculous meningitis. In another case of tuberculous meningitis, the pulse was at first quite slow, but towards the end became very rapid. In two cases of epidemic cerebrospinal meningitis, the pulse was excessively slow from the beginning. In three empyemas, two had a low pulse rate and one a raised rate. In four croupous pneumonias, the pulse ratio was decreased in one, increased in two and normal in one case. Two very marked cases of scarlet fever were high in pulse rate, and three well developed measles were evenly divided between decreased, increased and normal ratios. Other cases do not require mention.

In all cases studied both in adults and children, the diagnosis was reasonably sure from a clinical standpoint, and autopsies were made on nearly all those who died.

What deductions may we make from the statements of others and our own figures in typhoid fever and other febrile affections? Our figures for adults show that, in the first week of typhoid, the disproportionately slow pulse is certainly strongly in evidence to the extent of about three-fourths of all cases; that, in the second week, this condition is still marked to the extent of about half the cases; but that, in the later weeks, this feature plays no part. This is in general conformity with most observers. Dreschfeld's figures for the adult pulse rate, 86 to 100 in men and 100 to 120 in women, were confirmed very closely by our own. Only four of our forty-seven adult convalescents exhibited bradycardia. This is less, we think, than text books would give us to understand. But our own small percentage may be due to the fact that our figures are made up from averages: single slow pulse counts were not uncommon.

The results in the children's series were disappointing and our figures would seem to show that no definite conclusions could be drawn except to say that the pulse ratio seemed to be increased rather than decreased. This deduction was made from the fifty cases as a whole regardless of age, and in a re-analysis of these and a number of additional cases since come under our care, we find much confirmation of Curschmann's statements. In the oldest children, 13 and 14 years of age, the ratios closely approximate those of adults, and from here down to the youngest, the disproportionately slow pulse becomes less and less in evidence. Below 11 years, it is not often of value. Bradycardia was found in but one convalescent child.

In our citation of individual typhoid cases, it will be plainly seen that we have a point of extreme diagnostic and prognostic value. Except in the younger children, nearly every case in which the pulse ratio was increased during the first week or showed a marked or progressive increase in later weeks was complicated in various ways, ran a severe course or died. This point will be referred to again. The favorable significance of a persistently slow pulse in typhoid seems to be strongly emphasized.

The review of pulse rates in other febrile diseases does not include enough cases to permit definite conclusions for any single disorder, but the general findings are suggestive. Even in children, the pulse in a number of diseases likely to be con-

fused with typhoid was decidedly infrequent. In adults, the pulse rate in the whole number was disproportionately slow in about fifty per cent. of cases. In speaking of individual cases of malaria, pneumonia, tuberculosis, etc., it may be noted that in a goodly proportion the pulse rate was relatively slow, much more so than we have been accustomed to believe. We might say in a general view of the subject that as 75 per cent. of typhoids show the decreased pulse during the first week as against 50 per cent. of other febrile diseases collectively, the sign is of some but not excessive value in the former affection as a diagnostic aid.

We have noted in this study of typhoid fever pulses one constant feature, equally present throughout all other febrile diseases, and, we think, of great diagnostic, prognostic and unappreciated value. It is somewhat fashionable at present to use complex clinical methods, and we will often go to a great deal of unrewarded trouble with blood counts, gastric analyses, estimation of blood pressures or the eliciting of some new reflex. Yet in the simple estimation of the pulse rate, we have a true method of precision, without any drafts on time or technic and with results second to no other method. Its very simplicity is probably the cause of it being overlooked in many instances. We have purposely cited at some length individual cases of typhoid fever, tuberculosis, pneumonia, empyema, rheumatism, suppurative pylephlebitis, etc., and the point we wish to make has probably already been appreciated. *In any febrile disease in which the pulse ratio is progressively, persistently or markedly raised in relation to the temperature, either at its beginning or later in the course, we have a red flag suggesting a severe infection or a complication or both, with a prognosis to correspond.* The degree of danger would seem to be in proportion to the disturbance of ratio, and, to some extent, the absolute increase of the pulse rate. We know of no more constant clinical phenomenon than this, and its general application makes it especially valuable.

We conclude:

1. That, except in young children, the relative infrequency of the typhoid pulse is marked enough for diagnostic purposes in the first week or ten days of the disease.
2. That its value in this respect is somewhat impaired because the pulse ratio is surprisingly and disproportionately low

in a goodly percentage of other febrile diseases than typhoid fever.

3. That the persistence of a relatively slow pulse in typhoid is a valuable indication of a good prognosis.

4. That a progressive, persistent or marked rapid pulse, disproportionate to the temperature, is a clinical sign of extreme value early or late in typhoid fever and equally so in any other febrile disease, signifying diagnostically and prognostically serious conditions.

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THE QUESTION OF DIET IN CHRONIC INTERSTITIAL NEPHRITIS.

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It has been said that "man lives by his digestive system, and dies by his genito-urinary system." To go a step farther, it might be said that an actual majority of men die through the failure of one organ, the kidneys; for if we take into account the numberless deaths from cardiac dilatation, from the terminal infections, and all the train of other fatalities that tend to supervene upon chronic nephritis, to that disease rather than pneumonia we should apply Osler's expression, "The Captain of the Men of Death."

"Man lives by his digestive tract." Yes, and in his living prepares his own destruction; for the one cause of chronic nephritis is the food which furnishes day by day and year by year the poisons, the excretion of which by the kidney finally leads to inflammation and destruction of that organ. By our forefathers gluttony was ranked as one of the seven cardinal sins; and we, to-day, might wisely rank it as the greatest of all sins against health.

The contracted kidney is "the gouty kidney." Now, what is gout, and what its cause? Essentially gout is a toxemia, and its cause is not an excess of red meats, not alcohol, not one food or another; but an insidious but deadly poison formed in the intestines from food fermenting there because it cannot be digested. The theories of Murchison, implicating the liver in the formation of uric acid, and the more recent theories of Haig, never confirmed by the investigation of the physiological chemists, must be put aside. All later investigations tend to prove one thing: that the excess of uric acid comes, not from the food taken into the system, but from excessive destruction of the white blood corpuscles by some toxin; and though the exact nature of this poison remains unknown, there is little doubt that it is autogenous in origin and is a product of intestinal putrefaction.

With these premises, it seems unnecessary for me to apologize for my selection of a topic for this paper. The diet of the nephritic patient has varied widely, largely according to the pathological theory in vogue, and at last, the condition is one of chaos. I have no complete solution of the problem to offer you, even now. Instead, I shall simply ask you to review

with me the popular dietetic methods, analyzing as best we can the known factors in the problem, in order, I hope, to clear the way for better things.

I presume that Bright's discovery, in 1827, that disease of the kidneys was accompanied by albumen in the urine, was at once made the basis for a dietetic regime. Possibly the physician of that day, by no means clear as to the pathology of albuminuria, may have fancied that it was best to deprive the patient of albuminous food. Of course we know that such a procedure would have been based upon a fallacy, inasmuch as albuminuria results not from an excess of albumen in the body but simply through a lesion in the cells lining the Malpighian tufts, whereby the albumen of the blood is allowed to leak through into the urine. Indeed, so far as albuminuria itself is concerned, a more rational measure would have consisted in feeding the patient freely with proteid foods, in order to compensate for the loss entailed upon him by this renal leakage.

As time has gone on, however, the increase in our knowledge of chronic nephritis has only served to render our problem more complex. In one particular at least, the pathology of chronic nephritis differs from that of most of the other great organic diseases: in that its lethal termination is achieved, not directly by the failure of the kidneys to act, but quite indirectly, either by the effect of that failure in permitting certain violent poisons to accumulate within the body, and exercise their influence on other organs, or else simply through the morbid changes, usually sclerotic in character, which go hand in hand with kidney degeneration. We have to deal, therefore, not with such a relatively simple problem as that offered by the heart whose muscle acts with insufficient force or the stomach whose digestive juices are present in improper amount. Instead, our problem is a most complex one, in which an unwise effort may overcome one danger only to plunge the patient into far greater peril from another source. It is probable that the grave conditions in the course of chronic nephritis, those from which the physician must endeavor as far as possible to save the patient, are two in number, viz.:

1. Continued degeneration of the renal tissue, leading ultimately to inadequate elimination and uremia.
2. Continued changes of a similar character in the heart and arteries, eventuating in cardiac failure, or in apoplexy.

It is not possible, however, to clearly separate these two factors in the development and progress of the disease. For example, renal failure and uremia may be precipitated by the inability of the heart to keep up the high blood pressure by which in most cases the ineffective kidneys are forced to greater activity. On the other hand, the changes in the arterial walls and in the heart muscles are by no means all compensatory. To a certain extent the high arterial tension may be harmful rather than helpful, representing simply a reaction of the arterial walls against their continuous irritation by the toxic substances contained in the blood.

Clinically, at any rate, it is impossible to distinguish between these different features of the pathology of chronic nephritis. For the practical physician another view point therefore becomes necessary, and it seems to me that from the standpoint of the therapist, it would be wiser to recognize two distinct periods in the course of a nephritis, (1) the pre-uremic, in which pathologic changes, though present, are not yet sufficiently advanced to interfere seriously with renal activity; and (2) the uremic stage, that in which the accumulated poisons in the system are beginning to produce symptoms. This latter is practically a terminal stage, though its duration may be extremely variable.

The pre-uremic stage of chronic nephritis is one without symptoms. The discovery of the disease thus early is usually the result either of chance, or, more creditably, is due to careful routine examination of the urine in every case of illness. It is the period of the disease when treatment must prove effective, if it ever can be. Let us, therefore, consider the conditions with which we have to deal.

The patient, usually one who has reached middle life, is often in apparently robust health. He may never have known a day of illness. Often his physique is admirable, and generally he has been intemperate, not necessarily in his use of alcoholics, but in the richness, variety and quantity of his food. By chance or otherwise the physician has been led to examine his urine and has detected a small amount of albumin and a number of casts. The quantity of urine is somewhat increased, the specific gravity is rather low, and his arteries seem a little hard and tense. Subjectively his health is perfect; objectively, the signs are ominous. And yet we all

know how such patients can go on for ten, fifteen or twenty years, or even longer, outliving the most robust and finally dying of some disease to which nephritis bears no relation. The kidney, like the other great viscera, has capabilities far beyond the ordinary demands upon it; and it is amazing to find the destructive change that can occur without plunging the patient into uremia. The problem for the physician, then, is to conserve the remaining renal tissue. In order to accomplish this, he may have recourse to baths, climate and other aids; but above all things he must give to the diseased organ as large a degree of rest as is compatible with the body's necessities. The diseased kidneys, like the diseased heart, cannot for an instant cease their activity—indeed, I question whether it would benefit them if they did—but the unnecessary strains, the irritations which lead to tissue destruction, must be done away with. The patient has in some way been putting into his digestive tract food which, through its improper character or more often its too great quantity, has been undergoing fermentation and thus originating poisons whose ultimate effect is as deadly as their action is insidious. This must cease.

These two things, then, are demanded of this patient's food: that it shall be sufficient to nourish his body, but shall leave no excess to burden the organs of excretion; and that it shall be of such a character that it will not irritate the kidneys into a more active inflammation and degeneration. Let us consider what dietetic regime offers the best method of accomplishing the purposes.

Now, that it has been demonstrated that uric acid of exogenous origin, *i. e.*, from ingested food, is not responsible for the irritant circulating in the blood and excreted by the kidneys, the question as to the part played by proteid foods in the causation of nephritis is again opened. There is, let us remember, some authoritative testimony that meat can cause nephritis. Experimentally an exclusive meat diet has set up nephritis in dogs, and Adami contends that a similar diet can cause nephritis in a previously healthy human subject. It seems certain that urea, the most important solid constituent of urine and at the same time the one most irritating to the kidneys, will accumulate in proportion to the amount of proteid food ingested. But this is an extremely one-sided view of the problem. It is not a question of permitting those patients

to subsist on an exclusive proteid diet. It is rather to decide whether meat should be prohibited entirely. Is it possible to maintain general nutrition, to preserve the integrity of the heart muscle, and to nourish the kidney itself, with an absolutely non-proteid diet? I am convinced that it is not possible. Indeed, I am positive that more than one patient has gone to an untimely grave because the effort to save his kidneys from irritation eventuated in the starvation of his other tissues.

Fortunately the same exact methods that have achieved such brilliant results in the dietetic treatment of diabetes are now in process of application to nephritis. Our conclusions are far from final; but the road to finality seems at least to be open. It is important, first of all, to determine what the patient *should* take; and secondly, what he *can* take.

It is a fact familiar to all of you that the individual of normal weight (70 kg. or 154 lbs.) and moderate activity requires approximately 2,400 calories per day in food values; and that these should consist of about

600 calories of proteids,
600 calories of fat,
1200 calories of carbohydrates.

Moreover, it is impossible for the nutrition of a nephritic patient to be maintained without this maximum allowance. Only in the cases in which obesity is present, a complication most unfavorable because of its influence upon the heart, should less than the full daily allowance of food be given, and then only in order to reduce the fat. To otherwise attempt to lessen the supply will result in loss of flesh and strength, in anemia, and ultimately in premature death. Since these foods the patient must have, the only remaining question is as to the form in which he can take them. Our fundamental principle must be, to withhold, so far as possible, articles of diet which are excreted with difficulty by the diseased organ, and at the same time to build up the whole organism and especially to strengthen the heart muscle.

It must be kept in mind that in chronic interstitial nephritis we are dealing with a disease whose duration is not limited by weeks, but extends over years and even decades. Extreme dietetic limitations are, therefore, not only unwise from the standpoint of nutrition, but they are absurd in that they cannot be enforced. A few substances known to be extremely

irritating to the kidneys, generally alcohol and such condiments as pepper, nutmeg, garlic, celery and perhaps asparagus, should be interdicted; but otherwise the limitation should be only as to quantity. Coffee, tea and tobacco, because of their irritant effect on the heart, should be held to a minimum. The main problem, however, is as to the use of meats. It scarcely seems necessary to say that meat extracts and broths, because of the extractives contained in them, are to be avoided. Nor does it seem essential in this country, as it does in Germany, to warn our patients against the use of spoiled meats. As to the cutting off of red meats, substituting therefor the white meat of poultry, fish, etc., that is known to be perfect folly. White meat offers no advantage over dark meat, and in the interest of a more diversified dietary the latter should be permitted.

The plain fact is this, that under no dietetic restriction is it possible to permanently lower the urinary excretion of nitrogen below twelve gm. per day. This, according to Von Noorden, is the extreme lower limit, and any attempt to keep the ingestion of proteid food below the amount necessary for this output—and that means the ingestion of at least 85 gm. of proteid daily—can only result in the patient consuming his own tissues. Moreover, Von Noorden has shown that for nephritics in good health, from thirteen to sixteen gm. of nitrogen in males and from eleven to fourteen gm. in females is necessary. Should the amount be kept below this point, these patients become weak, tired and incapable of muscular effort; but as soon as they are given a greater allowance of proteids, they recover rapidly. To produce these values in nitrogen, these patients must consume in the neighborhood of one hundred gms. of albumin per day. This is best obtained by reckoning that the patient of average weight should consume daily:

- 750 C. C. (3 pints) of milk (equals 26 gm. albumin),
- 2 eggs (equals 13 gm. of albumin),
- 200-300 gm. (7 to 10 oz.) of meat for men (equals 30 to 46 gm. albumin),
- 150-250 gm. (5 to 8½ oz.) of meat for women (equals 23 to 38 gm. albumin).

This, together with albumin of ingested vegetables, the latter approximating 20 gm. of nitrogenous material daily, is sufficient to maintain the patient's strength and at the same time avoids unnecessary tax upon the kidneys. To go beyond this

allowance is directly harmful ; but it should be remembered that this allowance is for a patient weighing about one hundred and fifty pounds, and should be proportionately increased for a heavier individual.

Another question, one of scarcely less importance than that of proteid ingestion, is that of the quantity of water to be allowed these patients. For years most of us have been in the habit of recommending that patients drink all the water they can, in order to "flush out the kidneys." Indeed, it is only within a few years that the wisdom of this procedure has even been questioned. But let us ask ourselves what is the effect of drinking two or three or more quarts of water daily. It raises blood pressure, if that be desirable; it imposes more work upon the heart, which is certainly not desirable; and only by diluting the urine, not by lessening the total quantity of albumin daily excreted, does it bring down the percentage of the latter. Moreover, the excessive imbibition of fluids can do harm. Not only may it overwork the kidneys and heart, leading to premature break-down; but the entrance of large quantities of fluid into the circulatory system is well-proven to be a direct cause of arterio-sclerosis. For instance, in stokers and others who work in intense heat and drink a great deal of water, premature arterial hardening is the rule. Certainly, therefore, we can do real harm by the administration of large quantities of water.

In this matter, as in the use of proteid foods, our real safety seems to lie in keeping to the middle of the road. Excepting under exceptional circumstances, as where widespread dropsy is present, there is danger in greatly limiting the quantity of fluid consumed by the nephritic. Up to a certain point free diuresis may be assumed to aid the elimination of solids and to clear the kidneys of debris. But I venture to assert that not only is it true, as Von Noorden states, that "in many cases of contracted kidney (as in cases of cardiac diseases) sensible restriction of water may save life," but I would go further and say that in any case of nephritis in the pre-uremic stage, the ingestion of fluids beyond the quantity necessary to insure the passage of at most four or five pints of urine per day will do actual harm, leading to premature failure of the heart muscle.

For this reason, each of my patients is directed that his total consumption of fluids, including water, milk and other li-

quids, must not exceed three pints per day; and I have yet to see anything but good result from this moderate restriction.

In this connection I cannot refrain from speaking of the part played by sodium chloride in the production of edema in cases of nephritis. If sodium chloride is administered by mouth to a healthy individual, the elimination of the salt in the urine is found to correspond quite accurately to the amount ingested. With interstitial nephritis, however, the output of salt is variable; it is either increased, or decreased, just as edema may or may not be present; while in parenchymatous nephritis, in which dropsy is the rule, the excretion of the chloride is not at all in proportion to the amount ingested. The pathology of edema has not been clearly settled. Several years ago Loeb suggested that it might be a matter of osmosis, conditions of decreased oxidation leading to faulty metabolism and accumulation of soluble substances, notably sodium chloride, in the tissues outside of blood vessels, whither by osmosis, the fluids were attracted and thus edema was produced. This idea, worked out by Italian and French clinicians, has given brilliant results; and I think it may safely be affirmed that no measure is so effective in controlling the edema of nephritis—not that of cardiac insufficiency—as the partial or complete withdrawal of chlorides from the diet.

It has already been said that chronic nephritis is in great part a result of overeating, of gluttony; it has been stated that obesity constitutes a grave complication. It follows, therefore, that over-feeding is extremely perilous to the nephritic. There is danger that, unless the patient be warned, the restriction as to the amount of proteid food will lead to over-ingestion of carbohydrates. To prevent this, to save the patient from the ill-effects of too good an appetite, it is wise to prescribe many small meals rather than few large ones.

During the periods in which the disease is latent, a light lunch about ten in the morning and a few mouthfuls about four in the afternoon will greatly decrease the appetite for the main meals. In some more active cases it is well to give small meals every three hours; while in advanced cases with failing heart it is better to insist on a light meal every two hours.

It must be clearly understood that the diet here recommended must be suspended, when, as so often happens, an acute exacerbation is superimposed upon a chronic nephritis. When the

urine lessens or is even suppressed, casts become epithelial or darkly granular, blood is present, and edema develops, the treatment becomes that of a case of acute nephritis. Then the diet may be limited to a pint or so of milk per diem, if the quantity of urine is greatly reduced; and in the less severe cases it is well to limit the patient to about three pints of milk, to which about half a pint of cream has been added, until the symptoms begin to subside. Then gradually well-cooked rice, zwieback and butter, of each about two ounces, together with an ounce of sugar, may be added to the daily allowance; and finally, when every symptom has disappeared, the patient should be allowed by slow gradations to return to his more liberal diet.

Purposely I shall say nothing as to the diet of the patient in the uremic stage of nephritis. The indications must vary from time to time according to whether the case is one in which excretion is greatly diminished, when the greatest limitation may be necessary, or one in which excretion is free, with the general state of nutrition so poor that an increase even beyond the ordinary diet may become desirable. In general, however, I feel that in this stage it is unwise to torture the doomed patient with any unnecessary dietetic restrictions. It is enough to maintain his nutrition, making no unwise attempts at the impossible by severe restrictions as to his food. I do not believe, however, that the last word has been said on dietetics in the uremic stage. Though we are as yet in ignorance of the chemical substances responsible for this state of toxemia, investigations are possible as to the toxicity of the blood, and especially its toxicity as affected by various diets. This is a fruitful field for investigation, one from which a crop of facts of vast therapeutic importance may be expected.

Finally, let me call your attention to the value of blood examinations in determining the success with which your dietetic measures are meeting. A decline in general nutritive force has, in my own experience, been almost invariably accompanied by the evidences of symptomatic anemia. Such a development always justifies greater liberality in the proteid foods.

In conclusion, let me summarize my contentions. They are as follows:

1. Gout and gouty kidney are almost invariably due to overeating, intestinal putrefaction leading to toxemia.
2. Clinically, chronic nephritis is divisible into pre-uremic

and uremic stages; and only in the former can treatment be successful.

3. Complete exclusion of meat from the dietary, limitation to white meats, and an exclusive milk diet are alike dangerous, all tending to break down cardiac compensation.

4. During the inactive periods of the disease the patient should receive three pints of milk, two eggs and from five to ten ounces of meat daily.

5. Enormous quantities of water are decidedly harmful. Under ordinary circumstances the patient should consume about four pints of liquid per day, and in cases of threatened heart break-down the quantity can be further decreased with advantage.

6. Dropsy of renal origin can be more or less successfully combatted by withdrawal of sodium chloride from the dietary.

7. Meals should be small in quantity and frequent rather than large in quantity and infrequent.

8. Acute exacerbations in the course of chronic nephritis demand the same severe dietetic limitation as do cases of ordinary acute nephritis.

9. Systematic blood examinations, by revealing evidences of symptomatic anemia, will serve to warn the physician against the maintenance of too severe dietetic restrictions.

LEUCOCYTOSIS IN GYNECOLOGY.—Taylor (New York) has examined about one hundred cases and published the results. A tubal pregnancy in which the tube is unruptured and is not aborting causes little or no leucocytosis. With a tubal rupture or abortion there is an initial high leucocytosis depending on the amount and rapidity of the hemorrhage, and this leucocytosis diminishes as the bleeding ceases. After the blood has been encapsulated there is but slight leucocytosis unless it becomes infected or is complicated by other inflammatory conditions.

During the acute stage of a severe inflammation of the appendages associated with more or less exudate and localized peritonitis there is a leucocytosis varying usually from 15000 to 25000, and occasionally more. As the acute symptoms subside the leucocytosis diminishes. In chronic cases free from exacerbation there is practically no leucocytosis at all. If during the acute stage the peritonitis becomes general, the leucocytosis may be very high. Fibromyomata that have not degenerated show no leucocytosis unless complicated by diseases of other organs. Ovarian cysts without complications do not cause a leucocytosis. If the cyst becomes infected or if the pedicle is twisted, interfering with its blood supply, there may be a leucocytosis up to 26000.—*Amer. Jr. Obs.* Vol. LII, 532.

THEODORE J. GRAMM, M. D.

CLINICAL LECTURES ON DISEASES IN OLD AGE,

BY CLARENCE BARTLETT, M. D., PHILADELPHIA.

(Delivered at the Hahnemann Medical College of Philadelphia.)

I. PNEUMONIA.

IT so happens that our medical wards contain at the present time several patients of advanced years suffering from various types of disease. It seemed to me therefore that advantage might be taken of this opportunity to bring before you and demonstrate some of the phenomena of disease as observed in advanced life. I hope that in so doing, I will be able to prove to you that the pathological conditions as observed in advancing years are fully as interesting as those occurring at other periods of life. It is a common error among students and physicians to believe that the illnesses of the aged are devoid of practical interest, and their care brings but little of credit to the practitioner to whom they may be entrusted. This has always been a matter of considerable surprise to me, for while in waging the battle against death, the chances are against us, if we take with us a true sporting instinct of making effort under adverse circumstances, the success which frequently crowns our efforts secures for us all the greater credit. We have specialists for diseases of children, and for diseases of every organ of the body, but no one announces himself as a specialist in diseases in the aged. Why this state of affairs? Are the pathological conditions of old age monotonous in their sameness? Are their clinical investigations devoid of interest? Are the aged without friends to support the physician in carrying out his well-laid plans for their salvation? All of these questions demand a negative reply. Old age is liable to all the pathological lesions observed in any period of life past the age of forty, besides many others which are incidental to youth and early adult years. Their clinical investigation must be of interest. They have friends to whom they are near and dear. With the greatly improved therapeutic and hygienic management of diseases in younger subjects, more and more people will each year succeed in attaining that period which we see fit to call old age, until there will finally come a time when we shall have attained our ideal, and diseases of the aged and obstetrics will be the entire practice of the physician.

At present, the consideration of diseases of children attracts much interest on the part of physicians, students and the laity. And yet when you look into this fact, it seems to be without reason. The great point in the management of the curable affections of infancy and childhood is that of diet, the principles of which are easily mastered. Infantile problems are much more easily solved for we have to deal with simple pathological conditions unmodified by years of addiction to alcohol, tobacco, overwork, anxiety, and other disease producing agencies. You say there is a demand for paedologists. This is true; and there is demand for persons who are possessed of special knowledge of disease in old age and its management. Does not every such patient represent some one's parent? Old though they be, are we not anxious to keep them with us for time eternal were it possible? Grateful as we are for their long preservation, do we not long for them forever? And as for the aged themselves, do not be imbued with the idea that they are any more ready to die than are we who are actively engaged in the affairs of the world. Far from it! They have, it is true, fought their fight, and have attained a certain amount of success; but it is their fondest wish that they shall enjoy at least a few hours of rest in the evening of life before they pass into the great beyond. And so, gentlemen, I appeal to you on behalf of "The Aged."

What constitutes old age? This is a very difficult question to settle. We cannot place it arbitrarily at the completion of three score years and ten, for we know that there are people of seventy who are younger than others who as yet have scarcely passed the fiftieth mile-stone of life. Time after time will we have to treat persons whose mental and physical make up is that of very old men. Inquiry shows that during their youthful days, the same characteristics were prominent with them. Sometimes I have thought their premature senility depended upon a congenital pessimism which operated on all the bodily functions and brought about the early decay. Certain it is that those who early prepare themselves for the life of the aged by shutting themselves out of the fresh air, avoiding the pleasures of social communion with their fellows, bring about the inevitable with undue promptness.

The unconscious mind does certainly play an important part in the maintenance of health, and I have no doubt can delay or

hasten physical or mental decay. It is a common saying that association with the young keeps a man from growing old too fast. Most unquestionably it enables him to grow old gracefully.

The physical causes which make one man old at fifty while another preserves a relative youth at seventy are oftentimes hard to determine. Heredity plays an important part. Numerous examples of long lived families are within the knowledge of all of us. Insurance companies pay practical attention to this fact in their acceptance of risks. Special constitutional weaknesses, as gout, and its associated diseases, prevent their victims from attaining old age by reason of death at a comparatively early period. In other cases, the ailments of their victims are not sufficiently active to encompass this result, and the unfortunate drift into a premature senescence.

Of the acquired constitutional vices, syphilis deserves some consideration. Boy-Teissier says: "It is rare to see a syphilitic person become very old, and many of the stigmata of chronic syphilis belong to the clinical picture of precocious senility." We are so accustomed to regard syphilis as a disease of youth and middle age that we neglect a search for a history of syphilitic infection in the aged. I for one will plead guilty of this fault if it be such. Personally, I have very serious doubts if syphilis is responsible for any of the chronic illnesses of advanced years. The ailments at this time of life very seldom bear a close clinical resemblance to those of the young and middle aged that we have learned to regard as of syphilitic origin. We do know, however, that syphilis is capable of undermining nutrition without producing any of the well known stigmata of specific disease. It is reasonable to assume therefore that syphilis is capable of bringing about a premature senility.

To quote further from Boy-Teissier: Other infections "like tuberculosis may sometimes attain this morbidity, but more often they determine a true localized disease which destroys the patient after a rather long existence will have permitted the evolution of a precocious senility. At other times finally, the infection is of only temporary duration, and it is itself conquered in the struggle to which it has challenged the organism. But the latter severely wounded in the combat, will often retain an indelible mark of the assaults which it has re-

ceived, and from this moment the nutritive changes will remain modified, either diminished or perverted. It is this that we commonly find after certain cases of small pox, cholera, typhoid fever, or malarial infection."

Indulgence in alcohol favors the production of early senescence. Have we not all observed numerous instances of the alcoholic habitue at forty-five presenting all the phenomena of a man of twenty-five years his senior? As to the evil effects of tobacco, we are on less certain ground. So far as can be discerned, this poison can only bring about degenerative changes when used to unreasonable excess, and the production of intermediary disease.

While thus acknowledging the bad effects of alcohol, we must admit the existence of notable exceptions to the rule; exceptions which are so remarkable as to become noteworthy; every one becomes aware of them, and many quote them in defense of the alcoholic habit. I can recall one remarkable example of an inebriate who lived to the age of seventy-six, a most remarkable specimen of physical and mental preservation. He finally died of pneumonia supervening upon a spree. He lived to the age of seventy-six despite his bad habits. Had he been temperate, we have every reason to assume that many years would have been added to his life.

With these preliminary remarks, I bring my case before you:

H. B. T., aged 69 years, a machine polisher by trade. His family history is unimportant, as it is in most of the acute illnesses of old age. His father and mother are dead; causes unknown. His personal history is practically *nil*. He admits only measles and scarlet fever in childhood. His present illness began four weeks ago, when he "took a heavy cold." He had cough with slight muco-purulent expectoration. The cough was attended by pain; appetite good. Complains of an empty gone feeling in the stomach. Bowels loose; he generally has three movements daily. No night sweats. The bowel movements at present are mostly liquid, yellow, and very offensive, and often involuntary.

The patient's general appearance is that of a person much beyond his years. Any one to look at him would characterize him as a very old man. His heart sounds are normal, excepting for a well defined weakness of the muscular element of the

first sound. His aortic second sound is accentuated, as we would expect in a person of his age; but there are no murmurs. His radial artery is decidedly atheromatous. The pulse tension is not increased, as we would expect. Unfortunately, the functions of his gastro-enteric system are bad. Food is not well retained, vomiting occurring at intervals. The diarrhœa has already been referred to. He is obliged to get up three or four times a night to urinate. The urine is turbid in appearance, and of light color; decidedly alkaline reaction; specific gravity, 1012. Albumin is present in decided quantities. The examination for sugar gave a negative result. Microscopically, we found finely and darkly granular casts; pavement epithelium; a moderate quantity of pus cells; bacteria; triple phosphates. His tongue is dry, and for this reason is protruded with difficulty.

An examination of his chest shows well defined percussion dullness over the base of the right lung. Over the same area we note typical bronchial breathing. The upper portion of the right lung is the seat of a few small moist rales. The left side of the chest is somewhat hyper-resonant. Small rales are observed especially at the base posteriorly, and in the lower portion of the midaxillary region. His axillary temperature is mostly subnormal. Occasionally, it may rise to as high as 98.6 degrees. I have ordered simultaneous axillary and rectal temperatures, which show that the rectal temperature is usually two degrees higher than the axillary; sometimes a difference of three degrees is noticed. His pulse fluctuates from 112 to 130; and his respirations from 36 to 50.

The history as thus presented to you is sufficient to establish a diagnosis. No one will question the diagnosis of lobar pneumonia, for we have cough, rapid respiration, percussion dullness over the right base, and tubular breathing over the dull area. Without the physical signs, however, no such diagnosis is possible. The history of the case fails to show the presence of such commonly observed symptoms as blood stained expectoration and fever. The only possibility of error lay in the liability of the practitioner to neglect a careful physical exploration of the lungs, because of the lack of prominence of pulmonary symptoms.

Besides the pneumonia, we have all the necessary evidence to conclude that our patient is also suffering from chronic in-

terstitial nephritis, enlarged prostate, and chronic cystitis. But of these more later.

Respiratory frequency as great as that presented by our patient must of itself be looked upon as suspicious. The normal standard of respiratory frequency in old age is somewhat greater than that of youth and middle adult life, ranging generally from 22 to 24 per minute. Very slight causes make this frequency somewhat higher. Thus under the influence of fever, there may be shortness of breath and a respiratory rate of 30. But these figures are insignificant as compared with those observed in this case, namely from 36 to 50 respirations per minute. Indeed, they are of themselves sufficient to indicate with almost unerring certainty, pulmonary derangement. I feel therefore that there are very few physicians who would not at once make a searching investigation of the condition of the lungs. Such rapid breathing must be regarded as not having as serious a prognostic import as in younger subjects, by reason of the very slight influences which may give rise to them. Rapid respiration is necessary in the aged because of the demand for oxygen and the weakness of individual respiratory movements.

The absence of fever is one of the most interesting features of our case. You will recall that when I lectured to you on pneumonic fever, I told you that fever was sometimes noteworthy because of its absence, a condition that was especially liable to occur in the pneumonias of the aged, the nephritic, and the alcoholic. There may, therefore, be a double cause for the absence of fever, namely the advanced age of the patient, and the association of the disease with a chronic nephritis. The alcoholic factor plays no part. The absence of fever is one of the most interesting features of pneumonias of the aged. Even when present, the fever is rarely as high as in similar conditions of youth and middle life. Axillary and mouth temperatures are notoriously uncertain indicators in patients of advanced years. For this reason I ordered that the temperature be taken in the rectum as well as in the axilla. We note as a result that on one or two occasions only the differences between the two amounted to but one degree. In the majority of observations, it was two degrees, and in more than half a dozen, it was three degrees. These observations are very interesting, for as you learned from the course on diag-

nosis in your sophomore and junior years, the normal difference between axillary and rectal temperatures is but one degree. While thus impressing upon you the frequency of an afebrile course of pneumonia in the aged, I would caution you against expecting such a state of affairs in all cases, for we may have, in fact frequently do have, cases in which the temperature early attains a high figure. Such was the case in a lobar pneumonia attacking an old gentleman aged 88 years, whom I saw with Dr. W. W. Van Baun. Here the fever followed the usual course, and at one time attained the height of 104 degrees F. The patient died on the fourth day.

The cough in our patient is not an obtrusive feature. Indeed had I not made inquiry concerning it, I doubt if the patient would have mentioned it. The nurses trained as they are to note every symptom of the patient have made only occasional mention of it on their record sheets.

The physical signs are typical; hence they call for no special mention. In my study of pneumonia in the aged, I find that Andrew H. Smith makes the observation that the characteristic physical signs are not infrequently masked. Here is how he expresses his views: "In the aged, the physical signs lose somewhat of their distinctiveness. There is a tendency to increased resonance on percussion due to the rigidity of the bony framework of the chest, the greater depth of the thorax, and the backward curvature of the spine. The calcification of the rings of the trachea and bronchial tubes makes both the percussion note and the voice sounds more sonorous, while it impairs the distinctive character of vesicular breathing, substituting a somewhat bronchial quality. The excess of the bronchial secretion, which is almost physiological in old age, is likely to obscure the crepitant rale, which in any case is frequently absent in senile pneumonia." While the facts and theory based upon them are indisputable, nevertheless, it is very doubtful if the physical signs of pulmonary consolidation are much if any more difficult of detection than in case of similar lesions of early life. The absence of the crepitant rale in senile pneumonia has been explained by the larger size of the air vesicles, brought about by atrophy of the intervesicular septa (atrophic emphysema).

But the pneumonia is by no means the only serious feature of our patient's illness. You will recall our urinary findings,

namely, specific gravity of 1012, albumin in decided quantities, and finely and darkly granular casts; also pavement epithelium, bacteria, decided quantity of pus cells, and triple phosphates. You will also bear in mind that his history tells us that he has for a long time been obliged to rise three or four times in a night to urinate. We have then the signs which point to two distinct conditions, one an interstitial nephritis, and the other prostatic hypertrophy.

The existence of interstitial nephritis may be opposed on the supposition that the albuminuria is symptomatic of an acute pneumonic infection and to the presence of pus in the urine. While albuminuria may be found in pneumonic fever as in other acute infections, I doubt if it can appear excepting in very small quantities in a case like the present, in which the entire clinical phenomena include only moderate prostration and the physical signs of pulmonary consolidation. The amount of pus in the urine is altogether too small to account for the large quantity of albumin. Besides, we have the light and dark granular casts in considerable numbers.

I have not made an examination as to the size of the prostate but taking the alkaline urine, the presence of pyuria, bacteriuria and the triple phosphates, all signs of a cystitis, and knowing that such a condition in old men is almost invariably the sequence of prostatic enlargement, we may safely *guess* that condition to be present.

The prognosis in this case is bad. I base this opinion on our knowledge that pneumonia at the age of 70 years presents a mortality of certainly over 85 per cent.; on the coincident nephritis, which must add greatly to the danger; on the decided atheroma; and on his weak heart.

The treatment of a case like this demands attention more to the general or constitutional state than to the local lesion,—namely the pneumonia. I believe that we must pay special attention to the heart. It is necessary that the circulation be improved and at once. It is exceedingly doubtful if any medication designed to improve the cardiac nutrition can be sufficiently prompt to do any good. For this reason, I shall order that the patient be given three drops of Funk's fat free digitalis four times daily. His great prostration and the dryness of the tongue suggest the iodide of arsenic, which we shall give in the second decimal trituration four times daily. Should

the prostration increase, he will receive liberal doses of whisky. His diet should be highly nourishing and of good quantity. Unfortunately, he is not in the condition which permits of good feeding. Whenever you see a dry tongue like that presented by the patient, you can rest assured that liquid diet, and that of an easily assimilated character must be given. Even that can be taken in small quantities only. Our patient will be fed then on milk, plain or peptonized, and well made beef and mutton broths.

From what I have said, you must not conclude that pneumonia in the aged presents anomalous features in every case. Far from it, for there is a very large proportion indeed in which the course of the disease differs not from the pneumonia occurring in young adults. In still others, the general course of the disease is typical aside from the fact that the rational symptoms though distinct, are not as obtrusive as in younger subjects. Unless a careful examination is made, the medical attendants and the family are not apt to learn that the patient is as dangerously ill as he is. Very often the disease develops insidiously. The patient does not feel well, but can assign no cause for his illness. Such was the case in a man aged 67 years admitted but yesterday to the Hospital. He walked in at 2 P. M. with a temperature of 102 degrees, rapid pulse, and respirations of over 40 per minute. There was a fan-like motion of his *alae nasi*. A cursory examination of the lung showed a pneumonia. He died at 11 o'clock the night of his admission. Such a case of course is rarely observed in private practice, where patients have a home to go to and friends to look after them. Nevertheless it is possible for a pneumonia to obtain great headway before discovery. At any rate they are rarely observed excepting in hospital practice and asylums for the aged. Hourmann and Dechambre describe these cases as follows: "The old ladies never complain even of malaise; nobody in their sleeping rooms, neither waiters, nor nurses nor callers, notice any change in their position. They rise, make their beds, walk out as usually, feel a little fatigue, lean upon their bed, and expire. We open the cadaver and find a large part of the pulmonary parenchyma in a state of suppuration."

Prus and Teissier describe another class of cases in which the onset is that of a rapidly appearing coma, and were it not

for the autopsy which frequently shows the changes advanced to the stage of gray hepatization, the diagnosis would have been apoplexy. Of course we must admit that in these anomalous cases, there would have been no difficulty in making an early and correct diagnosis had the subjects been observed closely. There would at least have been noticed rapid respiration and pulse, lack of appetite, dry tongue, and other evidences of general ill health.

These cases must not be confounded with pneumonia which appears usually about the third day after an apoplectic seizure. Cases of this kind are due either to aspiration of food particles or to hypostasis. So common are they as a complication of cerebral disturbances, that it becomes the duty of the physician to make careful auscultation of the lungs, especially over the bases posteriorly at each visit. There should be no delicacy concerning disturbing the patient, for such examination can be carried out very readily. Cases have been reported in which the primary lesion is the pneumonia, the paralytic phenomena developing about the fifth day.

In any disease which confines an aged subject to bed for any length of time, there must be a careful watch for pulmonary hypostasis. About five years ago, I attended a woman of 68 years, her sole complaint being an obstinate constipation that nothing could relieve. Her heart was weak. No enemata and none of the usual purges succeeded in promoting an evacuation. Her mental condition was decidedly distressing. The diagnosis of bowel obstruction was made, both by myself and consultants. Then she developed a cough, with blood-stained expectoration, and physical examination showed consolidation at both bases. She died and the autopsy disclosed hypostatic pneumonia, decidedly fatty heart, and no bowel obstruction. I shall refer to this case in a subsequent lecture, as it teaches important lessons concerning affections of the digestive tract in the aged.

The results from the treatment of old people with pneumonia are so poor that it is difficult to speak with any positiveness as to efficient measures for their cure. Ferrum phos. which is so valuable in the pneumonias of early and middle life does not seem to be indicated. Phosphorus cured one case for me. The ordinary symptoms of a bronchitis were present, with the signs of consolidation at the right base. The patient was 76 years

of age, and had an outrageously bad stomach, and a worse appetite. During convalescence, her pulse became highly irregular, and the heart action weak. Digitalis was then given, and the gastric symptoms began to mend. I shall use this case as one of my texts when speaking of the gastric affections of the aged. The patient is now well in all particulars, though taking her digitalis from time to time.

There not infrequently comes a time in the course of these pneumonias in which, notwithstanding frequent coughing, there is no expectoration. Coughing seems to do nothing more than churn a lot of pulmonary secretions. We used to speak of this state as the "paralytic catarrh of old people." If anything will do any good here, it is antimonium tart. 2x or 3x every hour. At the best the condition is a serious one, very few recovering. Apomorphia 2x may also be tried. Hot whisky punches sometimes aid expectoration. Ammonium carb. is indicated more in the broncho-pneumonia with profound adynamia. It may be used in potency or crude. The heart is greatly weakened. The cough is attended by loud bubbling all through the chest.

Digitalis must be regarded, however, as one of our main remedies, for the conditions which it relieves are common attendants upon senile pneumonias. To those who object to its use from doctrinal standpoints, let me quote Lilienthal, who recommends it for "pneumonia senilis, the heart's action failing; respiration irregular and performed by frequent sighs; respiratory murmur feeble; passive congestion of the lungs dependent upon a weakened dilated heart; cough with profuse loose purulent sputa or of a sweetish taste, sometimes with a little dark blood; passive hyperæmia of the brain." Certainly we find this clinical picture practically constant in the pneumonias of the aged.

VISIT TO DR. TUSS HAHNEMANN.—The following information comes from the *Boletín del Hospital Homeopata, de Barcelona*: Dr. R. Haehl, of Stuttgart, who for some time is collecting data to publish the complete biography of Samuel Hahnemann, is at present in England, to procure from Dr. Tüss Hahnemann, of the Isle of Wight, whom he is visiting, the most ample news about the life and achievements of the master. Dr. Haehl is commissioned, at the same time, by the German Homœopathic Society, to deposit wreaths on the graves of Hahnemann and Burnett.

**MENSTRUATION, OVULATION AND PREGNANCY FOLLOWING REMOVAL
OF BOTH OVARIES.**

BY DEWITT G. WILCOX, M. D., BUFFALO.

THE physiology of menstruation has been a disputed and much discussed phenomenon for ages. The old Mosaic laws, requiring the isolation of the menstruating woman, show clearly that the function was then regarded as an effort on the part of nature to rid the woman's body of a noxious humor. There are many popular beliefs existing to-day which show the remains of that old-time superstition. Among them is the ridiculous custom of some surgeons of prohibiting a menstruating nurse from entering the operating room.

The real cause of menstruation seems as inexplicable to-day as it was in the early days of medicine. One eminent authority of to-day says: "As a matter of fact, the cause of menstruation is one of the many life phenomena at present beyond our comprehension." We do know that it is a nervous influence proceeding periodically from the sympathetic ganglion of the lower abdomen and pelvis, stimulating and congesting the sexual organs, but what induces that influence and what regulates it, we can no more explain than can we account for the nervous force, which regulates and induces the respiratory act from the moment of life until the hour of death. While we cannot understand its cause, we can comprehend its mechanism. This nervous phenomenon, which is so accurate in its workings, produces a congestion of the uterine mucosa; this delicate membrane thickens, capillaries rupture, the blood flows. Coincident with this there is in the majority of cases, a rupture of a Graafian follicle and ovulation occurs.

But we need not look far for evidence that ovulation can take place without menstruation, or vice versa. The common occurrence of impregnation, occurring during lactation, when there has been no menstrual flow at all, is evidence of ovulation without menstruation. I know of a physician's wife, who menstruated once after her marriage; she then, one after another in due process of time, bore ten children, during which period she never menstruated once. Three years after the last child was born, or just eighteen years from her last menstua-

tion, she began to menstruate and did so regularly up to her menopause, which came on in twelve years. In this instance ten pregnancies occurred with but one menstruation.

The regular occurrence of a menstrual flow for years in women, who have had both ovaries removed, is evidence of menstruation without ovulation, and Kelly reports a case of removal of both ovaries and all of the uterus save the cervical stump, where menstruation occurred regularly from that stump during a period of years. This case of Kelly's would seem a demonstration that even the severing of nerves, which connect the ovaries, tubes and body of the uterus to the pelvic ganglion is not sufficient to check the impulse of that ganglion, nor to impede the progress of the stimulation which emerges from it. How delicate, yet how intimate must be the connection between this ganglion and all of the female reproductive organs, even to the end of the cervix, to allow a congestion sufficient to produce menstruation to take place.

Twenty years ago when Tait and Beatty began to make double ovariectomies and oophorectomies, they generally told their patients, upon whom such operations were performed, that menstruation would then cease forever, but observation soon proved that such was not the case, for a certain per cent. of such patients continued to menstruate just as usual, some ceasing after a few months or years, others going on to the normal menopause.

My object in thus reviewing matters familiar to you all is for the purpose of bringing afresh to your minds the fact that menstruation and ovulation are not necessarily synchronous; that ovulation may take place without menstruation and that menstruation may and does frequently exist where ovulation is impossible, as in the case of removal of ovaries. But I have yet to find anywhere reported an instance where menstruation, ovulation and pregnancy followed the removal of both ovaries and tubes except in the case which I am about to relate.

Before relating the case, I desire to ask that those of you who know me best and longest will make a short review of my record and where you recall instances of a lapse in my veracity, you will not allow those insignificant lapses to influence you in the least in accepting the truthfulness of that which I am about to relate.

In the year 1895, December 17th, Dr. Swett, of Medina,

brought to the Lexington Heights Hospital a young woman, aet. 24 years, with the following history, which was recorded at that time: Unmarried, previous health good, until eight months prior to date. Began menstruating at fourteen years; been normal since. Two of her mother's sisters had had fibroid tumors and her own sister had been operated on for ovarian cyst, with recovery. The previous spring, patient began having right ovarian pain with painful, irregular and scanty menstruation; later the pain became more constant and kept her awake much at night. I examined her, found a good sized right ovarian cyst with a similar one on the left side. An abdominal section was then made and in the presence of Dr. Swett and two other physicians, both ovaries and tubes were removed. The right ovary proved to be a thin walled cyst, about the size of a Florida orange and involved the entire ovary. Its walls were so thin that they ruptured in delivering it from the abdominal opening. My method at that time of removing ovaries and tubes was to transfix the pedicle of the ovary with a double ligature on a transfixing needle, tie each half of the pedicle, and then cut off the ovary and tube clear to the ligature; this method I pursued in this case. The left ovary was equally cystic, but rather smaller and was treated exactly in the same manner. Her recovery was uneventful and her health since has been normal. She has developed into a robust woman of rather more than the usual height and weight.

At the time of her operation she was engaged to be married to a Buffalo man, who is now a principal of one of our public schools. He was in the hospital at the time of her operation, was informed of her condition and his consent obtained to the removal of the ovaries. About eight months subsequent to the operation the couple were married, both of them fully understanding the apparent impossible bar to their having children. The patient began menstruating one month after her dismissal from the hospital and has continued to do so since without irregularity or other abnormality until July 27th, 1902, a period of about seven years. She then suddenly ceased but continued well otherwise. Having been told she would sooner or later cease menstruating, owing to the operation, she concluded that such time had arrived and gave it no more thought. In October of that year she consulted me, telling me for the first time of her suppressed menstruation and complaining of

a sensation of fullness in the lower pelvis, frequent micturition and some stomach disturbance. She feared that she was developing another tumor, yet was strongly impressed that she was pregnant. I made an examination and found the uterus large, soft, movable and to all appearances like an impregnated uterus. Her breasts were large, her nipples discolored, in fact, she had a typical resemblance to a three months pregnant normal woman. The following month she came to my hospital, where she remained a week, in order that I might more closely observe her condition. The fact that she was pregnant began to be so apparent that it could not be denied, notwithstanding the apparent impossibility. She then went to see Dr. Swett at Medina, who after an examination, pronounced her pregnant beyond all question of doubt. The patient then began her preparations for confinement with as serene and confident a manner as though the bearing of children in apparently sterile women was a matter of daily occurrence.

Her further gestation was without incident. Upon May 1st, 1903, at her Buffalo home, I delivered the woman of an eight-pound baby boy. Dr. Swett had been summoned by me and arrived a few moments before the child was delivered. The patient's labor was in all respects normal, save that it was slow and the use of the forceps was necessary to aid delivery. Three months after the delivery of the child she again began menstruating, which has continued normal to the present date. Her child is as healthy and perfect a boy as can be found, having had little or no sickness after the first few weeks of life. The mother nursed the baby for about three weeks, when her milk failing she resorted to artificial food. The explanation of this unusual phenomenon is possible only upon two premises:

The first and the most plausible is that a minute portion of ovarian tissue was left with the stump in which case that bit of tissue must have become attached to the uterus, close to the uterine orifice of the amputated tube, making possible the passage of an ovum into the uterus, a condition which might happen once in ten thousand chances. Against this theory is the fact that both ovaries were cystic and that the cysts involved the entire organs, and that in removing the cyst it would seem that the entire ovary was removed.

Again, the distance between the stump of the ovary and the uterine orifice of the amputated tube would seem to preclude

the possibility of an ovum finding its way into the uterus unaided by a tube.

The second explanation is that there was a third ovary. This I very much doubt, first, because of its extreme rarity; second, because of the likelihood of its being noticed at the time of the operation.

The evidence of this unusual case only impresses the more deeply upon our minds those facts which soon become more deeply impressed upon the physician the longer he practices, namely, that in dealing with nature, we must ever be ready for surprises from all sources. Her determination to carry out her laws in spite of all difficulties and obstructions causes her to circumvent those obstructions in a way past our understanding.

A TREATMENT OF JOINT INFLAMMATIONS.

BY HARLAN P. COLE, M. D., NEW YORK CITY.

THE statements of the best and latest writers would lead us to believe that joint inflammations were not tubercular in the beginning, but were due to an injury to a part, the vitality of which was below the normal level, and that the inflammation "in the majority of cases" is outside the joint cavity. When and how these diseases become tuberculous no one explains. These conclusions suggest the possibility that the disease may be located in the structures surrounding the joint cavity, at a point where the injury occurred, and involves other issues than the joint cartilages and bone ends; that the pulling apart of the bones forming the joint, and the consequent strain upon the inflamed ligaments, tendons, and muscles surrounding them is not imperative; and that the admission of a limited amount of motion to prevent the adhesion of those inflamed tendons and muscles to each other, would not result in a greater calamity than the almost inevitable ankylosis which follows, and is looked for as a good result, from the fixation treatment. When we are called upon to treat a fracture that has occurred near a joint, we are very careful to resort to passive motion as soon as possible in order that the reparative inflammation shall not bind down the tendons and ligaments and thus ar-

rest the motion of the joint. When we have a local inflammation in the vicinity of a joint from a local injury that does not fracture the bone, we have an equal disposition to the deposit of plastic lymph that will as surely arrest the motion at the joint.

All writers agree that joint inflammations are liable to, and usually do, occur in individuals whose vitality is below the normal level, which means weakness and relaxation. Inflammation in a part means more blood in that part, which can only be accomplished by dilation of the blood vessels in that part. The walls of the arteries are thick and strong and will not dilate, therefore the dilation must occur in the capillaries and veins. This dilation admits of a greater accumulation of blood, more pressure, and an effusion of plastic lymph between the ligaments, tendons and muscles, binding them together, and thereby limiting and finally preventing action at the joint which they control. This effusion also presses upon nerve ends causing pain.

All this comes about through the gradual distension of capillaries, and it can only be corrected by the restoration of a normal circulation, and later of normal vitality. The normal circulation in a healthy part is maintained by the muscular wall of the blood vessels supporting the column of blood forced into and through them by the arteries, assisted by the lateral pressure of contracting muscles which increase their lateral diameter when they contract. As both these aids to circulation are lost, repair is not possible without assistance, and fixation does not improve the local condition but allows the effusion to continue and increase. A carefully applied roller bandage gently presses all the tissues together and supports the walls of the bloodvessels so that the force of the heart's action will push the current of blood along through the capillaries, reabsorption will be promoted by the pressure, and the more rapid flow of the blood current; and restoration will progress with every heart beat.

The pressure of the bandage can be assisted at points where the surface is uneven by padding the deeper places so that the pressure will be uniform. But let me say that a bandage is as much the worst enemy as it is the best friend of the surgeon. If the pressure is uneven or the return flow of venous blood is interrupted, the difficulty will be increased or a new one

produced. I notice a habit on the part of physicians, and of many surgeons to reverse a bandage frequently, often making a reverse at every turn. I would say that every necessary reverse is a weakness of surgery, and every unnecessary reverse of a bandage is a weakness of the surgeon, for at each reverse the value of that turn is lost, for the bandage is thickened and narrowed at the fold, and uneven pressure is certain. A bandage should never be reversed when applying it to the foot and ankle, knee, elbow or wrist. Both edges and the entire breadth of the bandage must press evenly.

Whitman, in a very recent work, concludes a lot of statistics on knee joint inflammations by saying: "This view is generally held in this country, that in the great majority of cases the disease in the bone precedes the disease in the interior of the joint." Mr. Arbuthnot Lane, of London, describes several cases where the cancerous end of the bone had almost entirely sloughed out through an opening at the side of the bone, leaving the articular surfaces intact, showing that the disease had attacked the bone from the side, probably at the point of injury and not from the joint surface. Lane also says: "It does not follow that tubercule bacilli are always the first settlers." In Judson's book on "Growth and Deformity," page 65, we find—"the affection developed in a joint is seldom fatal;" later on page 83—"After white swelling, the patient must, as a rule, make himself content with a knee that has no motion." I will give a short report of four cases that serve to illustrate my proposition.

Case 1 is very typical and I give the statement of the physician, Dr. Van Tine, of Philadelphia, an uncle of the patient. "After being weaned at about eleven months, she was given milk from one cow, and that animal was found to be tuberculous. This is the only avenue possible for the entrance of the bacilli. The discovery that the cow was tuberculous was made after the ankle showed signs of disease. At the age of one year and a half the ankle was bruised and the swelling soon followed. She was brought to Philadelphia and the joint was opened and curetted, by Dr. Van Lennep, under whose care she remained for three months, when, at the age of two years, she was placed under your care at the suggestion of Dr. Van Lennep. The pus and caseous matter removed from the joint indicated un-

doubted tubercular infiltration, although no bacteriological examination was made. The cavity was packed with iodoform gauze and she received occasional doses of tuberculinum 30th."

This report was sent me at my request. When the patient came to me the foot and ankle were enclosed in a plaster of paris bandage that had been on some time as the parents did not bring the child to me immediately after their return from Philadelphia. The bandage was removed and quite a collection of pus found at the site of the operation, though not extending into a joint. After the pus was evacuated the ankle was so large that a shoe that comfortably fitted the other foot would not reach round the lame ankle, and a piece of leather an inch wide had to be set in the front of the shoe so that it would button over the ankle. The abscess was kept open until it healed. Dr. Van Tine closes his letter with the remark: "At present she is in robust health and her lameness is almost imperceptible."

Case 2.—A boy two years old. The only injury known was, he was caught by one leg as he was about to fall out of bed. He was of tubercular diathesis, and a large ecchymosis would follow the slightest injury. His father died of tuberculosis. At my first call the knee was so swollen that the bone ends could not be distinguished. The disease had existed about one year. There was substantial fever, coated tongue, and food was refused. The treatment of both these cases consisted in the application and continued use of a firm, snug, muslin roller bandage. In both cases the swelling rapidly subsided, and the appetite returned. Case 1 would not touch the lame foot on the floor under any circumstances, although she frequently did move the ankle joint, but went about on her knees until one day she found that it did not hurt, and at the next call she walked proudly into my office with very little limp.

Case 2 was not so tractable, but was a case of perpetual motion. I therefore fitted a leather splint to his leg in two pieces, one front and one back, laced together at the sides. With this he ran about like any boy. There were many backsets from falls, at which times there would be return of fever and loss of appetite; but both were corrected by two days' bandaging and he started out again. I made an opening in the splint over the patella to prevent pressure. At the end of two years he

was wearing only an elastic knee cap and had full use of the joint. Five years later his mother told me he was perfectly well. The thing accomplished in both cases was continuous mild, evenly distributed pressure over the whole of the swollen area.

Case 3.—Mr. D., age 45, came to me for an examination only. He had just seen a specialist who told him the joint was undoubtedly tuberculous and a resection was necessary. The right knee at the joint was two inches larger than the other and the leg at different points below the knee was half an inch to an inch and a half larger than the other; the thigh at its center was an inch smaller than the other owing to the lack of ordinary use of the thigh muscles from immobility at the knee. After hearing my views of the pathology and treatment of these conditions he decided to place himself under my care.

A roller bandage was applied from the foot to the point above the knee where the thigh was smaller. Next day the bandage was reapplied, as the swelling had noticeably reduced, and two days later, or three days after the first call, there was more than an inch reduction in the size of the knee. During all this time he was about on his feet every day teaching in one of the city schools and living out of town, going back and forth every day. After this the progress was more gradual but continuous. In the course of six weeks the leg had become almost normal in shape, and though at first I feared complete ankylosis, there was considerable motion when he left off treatment for his summer vacation. In the fall he returned for further treatment, at which time I prescribed an elastic knee cap, and used vibration gently over the tendons above and below the knee to work out the plastic effusion that was deposited between them. This was continued up to this writing, and he now (four months after his first call) uses the whole foot in walking and bends the knee, whereas when he first came, there was no motion at the knee, and he stepped only on the toe.

Case 4.—Miss F., aged 20, was paralyzed at two years, did not walk till more than three years of age and then very little about the house, never outside. Between four and twelve years she gradually developed talipes, at sixteen was operated on for "Clubfoot" and remained in the hospital four months.

Six weeks after leaving the hospital her surgeon called at the house to examine the case and discovered "hip disease." She was placed in bed and extension with weight and pulley was applied for six weeks, after which she wore a hip brace for twenty-eight months, or nearly two and a half years. At the end of this time she came under my care, her condition being as follows: There was little or no motion at the hip; when lying upon the back with the lumbar spine straight, the right leg had to be drawn up to more than an angle of 45 degrees; when the leg was brought down to the level of the body, the lumbar spine was bent so much that I could pass my hand under it, when the hand was turned up on edge. She walked only with a brace and then very little; never without help; but she was continually breaking the brace. She could not sleep lying upon the back or straighten out while in bed, and would often have to sit up a long time in bed on account of pain in the muscles at the top of the thigh in front, which varied with the amount she attempted to walk. I kept her in bed for a few days with a snug spica bandage applied to the thigh and hip, when I allowed her to get about with a spica bandage made as follows: A piece of canton flannel long enough to reach around the hips, and wide enough to reach from the umbilicus to the lower third of the thigh, was lapped in front and pinned snugly down as far as the lower edge of the symphysis pubis. Here the side covering the well hip was split around as far as the sacrum and the lower half fitted snugly around the thigh that was inflamed. With this she could get about nicely without her brace, and the thigh improved so that at the end of two weeks she could lie flat upon the table, and the lumbar spine would touch my flat hand passed under it.

As soon as the local tenderness would permit, I began the use of the vibrator as in the preceding case, giving most attention to those muscles on the front of the thigh that had become adherent to each other while the patient was so continuously in the sitting position, and which held the thigh in a flexed position. It was strain on these muscles which caused the pain in the groin. As the foot was very small and weak from lack of use, and its plantar surface shortened by scars from the operation, and the foot turned toward the inner side when she attempted to walk, I had her shoe rebuilt so that it was firm and would not turn when she put her weight on it.

She now began to walk without her brace, and on the ninth day after my first examination she came to my offices from Brooklyn with her mother. Two weeks later she came alone and has been coming at frequent intervals without assistance ever since. She has not worn her brace since I first saw her, for I have it; she has not had a relapse, and her foot is three inches nearer the floor when standing, beside being three-eighths of an inch wider, and three-eighths longer than at first, from use in the normal position. Up to the time I first saw her, she never walked without her brace and very little with it, the leg was edematous, weak and cold: now the edema is almost entirely gone, the temperature is normal, and she recently took a three hours' tramp in one of the parks with her brother, without assistance. She has been going about Brooklyn and New York all summer doing manicure work, whereas nine months ago she never went out without assistance, always wearing her brace, and then only for a short time.

DELIRIUM AND HALLUCINATIONS AS TOXIC EFFECTS OF DIGITALIS.

BY WILLIAM F. BAKER, A. M., M. D., PHILADELPHIA.

THAT a relationship does exist between the toxic effect of digitalis and certain symptoms found in cases of advanced heart disease, has been suggested to me by the observance of several cases, two of which will be cited below. This relationship was observed, although the tincture of digitalis was administered in very small doses.

Such toxic phenomena might easily have been mistaken for symptoms referable to the pathological condition *per se*, uninfluenced by any medication, yet this significant fact remained, viz., a subsidence of the delirium as soon as the drug was withheld. In other cases not only was the digitalis discontinued, but a complementary remedy used.

The next most significant fact observed was a return of the delirium and hallucinations, when, because of indications, digitalis was again administered.

The question now arises in the treatment of patients with advanced heart disease associated with any delusion, hallucination, or idea of mistaken identity, how much of these symp-

toms depends upon the pathological condition *per se* and how much upon what we must term "toxic effects" of digitalis. The indications call very often and unmistakably for digitalis, and digitalis ought to be administered, yet this therapeutic precaution and hint may be set forth, that in the treatment of conditions calling for digitalis, look upon the occurrence of delirium as a physiologic and toxic effect of the drug and particularly so when the heart is doing well, and digitalis is doing its duty as an active therapeutic agency.

The thought that digitalis could be the disturbing factor in the cases about to be cited, was furthest from my mind, but this fact was evident, that notwithstanding the betterment of the circulation and increasing heart strength, instead of having the mind clear up, a nightly delirium presented itself. When, owing to the improvement, we ought to expect mentality to be at its best, hallucinations and ideas of mistaken identity were present.

Another most marked characteristic of this delirium is that the most efficacious measure which can be advised for its relief is a discontinuance of the digitalis and a substitution of complementary medicines, which happened to be in these cases glonoine and crætagus.

Case 1.—Male, aged 63 years, manufacturer. Was perfectly well until four months ago, when he began to develop palpitation, dyspnoea, and cough. In fact he complained so much of his heart that he was advised to purchase tincture of digitalis and take five drops every three hours. This was on the supposition that he had "heart disease," and digitalis was good for "heart disease." Up to this time he had not consulted any medical adviser. His complaints were brought to the attention of his family and he was persuaded to consult some one, and then he was brought to my office. Upon reaching there he immediately began ordering the patients about in the reception room just as I supposed had been his custom in the mill, of which he was owner. In his loquacious and talkative mood, he was sure that he was losing money heavily, although his secretary had advised him of the best year in the history of his business.

At first I had some little difficulty in getting him to recognize me, although I had known him well, but after a time I induced him to come inside. He was given glonoine 1-100

grain and after a little while his condition became much better, so that he was able to be removed to his home.

Upon completing my examination, I found him suffering from advanced cardio-vascular disease, including cardiac valvular disease and interstitial nephritis. The pulse tension was high. A soft blowing murmur was heard at the apex. The heart itself was tremendously hypertrophied and somewhat dilated.

Upon removal of the patient to his home, under the administration of glonoine, an improvement was noticed, although a nightly delirium of mild type showed itself. The patient at intervals was unable to recognize his family. After a few weeks rest in bed, he gradually recovered and was up and about at his work again.

The patient was now lost sight of for a period of three months, but was under the care of another physician who was giving him his "heart medicine" as he very aptly termed the digitalis. I was again asked to see him, and then his daughter told me what had happened, and she added a description of her father's conduct, showing his disposition to have been entirely changed while he was taking digitalis. It was really her description that set me to thinking of the possible relationship that she suggested.

During the period of taking the medicine the patient would become irritable and cross, quite the contrary to his natural disposition. Attacks of depression of mind would follow, and after a time he became utterly indifferent to his business and family. Again, under the administration of glonoine and strophanthus, he recovered and resumed work. In this comparatively good condition he remained for six months.

No more was heard of him for some time until in response to a hurried call the patient was found threatening his family in a state of violent mania. Under the influence of stramonium he finally quieted after a night of hard struggle. The history given at this time was that he had been treated for his heart condition and had been taking by prescription digitalis. Under care he was sent to sanitarium and there recovered.

Some few months after he was seized with a heavy cold and a general anasarca developed. With the subsidence of this he was troubled with the heart condition and in this state was seen by Dr. Bartlett in consultation. Again the indications

were for the use of digitalis and under its use the condition of the heart improved, but the dosage was carefully watched, and at the slightest approach of the delirium, discontinued. From this attack likewise he recovered, succumbing a few weeks later to an attack of what might be called angina pectoris.

The most noticeable features of this case are seen in the repeated indication for the use of digitalis, its beneficent results, and the oncoming delirium as soon as the system reached a point of saturation as it were, and a subsidence of the aggravated mental condition as soon as the drug was discontinued.

Case 2.—Female, aged 7 years. This case was under treatment for a rheumatic endocarditis associated with lesions of the mitral and aortic valves. Cardiac hypertrophy and dilatation being also present. A general anasarca developed later, and with it the condition of the heart called for the use of digitalis. The indications were the extremely weak pulse, cyanosis and a tendency for the heart to further dilate. Digitalis was administered in doses of from three to five drops every three hours.

There was no rise of temperature after the initial fever of the rheumatic infection, and under treatment the condition of the patient in general began to improve, but simultaneously there developed a mild delirium coming on at night with hallucinations of animals as cats and a tiger crawling in the bed. She would utterly disregard the members of the family and could not recognize them. After having my first experience, naturally it was suggested that the digitalis be discontinued for the condition of the heart had been improving. This was tried with good result.

Following upon this attack of rheumatic fever the heart suffered most, although the patient could be up and about and seemed fairly well until following exposure she developed pneumonia. This disease ran an uninterrupted course, the temperature falling by crisis on the ninth day. After the crisis had been reached attacks of syncope were quite frequent, and upon the advice of Dr. Snader, the consultant, digitalis was administered in two drop doses with marked benefit to the heart and the circulation, but it had not been used more than a few days when the same mental condition began to show itself.

The indication then was to substitute crætagus, three to five drops of the tincture every three hours. This relieved the mental condition and the patient made an uneventful recovery and has been well for a period of several months.

Later, however, there developed an ascetes which tapping and drawing off of seven gallons of fluid, relieved. Since this the child has been well.

Certainly the relationship between the delirium and the physiological action of the remedy seems to be established by the recitation of these two cases, but no attempt will be made to explain this relationship. It would seem that this conclusion could be reached, however, that in the treatment of cases of advanced cardio-vascular disease where the indication is for digitalis and in the course of the treatment a delirium presents itself, if the condition of the heart be good and the digitalis doing the work that is expected of it, the indications are for either a reduction in the dose or the use of a complementary remedy. It is needless to state that where the indications are again afforded digitalis may be resumed, being careful to note its effect and to keep just inside of its physiological effect.

OPHTHALMIA NEONATORUM.—Morax says: Although the gonococcus cannot be regarded as the only cause of this disease, it is so in 50% of the cases, and it is this micro-organism which causes the most severe cases. Comparative statistics show that the gonorrhoeal form of ophthalmia begins about the third day after delivery. Still, an ophthalmia which shows itself within the first five days may or may not be gonorrhoeal. Ophthalmias, however, which begin on the seventh day or later are in all probability not gonorrhoeal. It has been shown that the duration of the disease may vary from six days to two months. Ophthalmia neonatorum is often accompanied by general symptoms, and also by local affections of the joints. The author does not believe that the newer silver salts are as good as the nitrate in the treatment.—*Abs. In Centralbl. f. Gyn.* 1905, 414.

EDITORIAL.

SOME REMARKS ON THE FINANCIAL AND LEGAL ASPECTS OF A PHYSICIAN'S CAREER.

It is surprising when we consider the number of physicians of unquestioned professional skill whose lives have been made burdensome and whose success has been thwarted by financial failure. While it is certainly true that the desire for gain is not the noblest incentive to work that a practitioner of medicine can have, nevertheless every physician owes it to himself, to his family and to the community, that he make reasonable and rational efforts to earn sufficient money to support himself and those dependent upon him, and to conserve such a portion of his earnings as will enable him to provide for the day when illness or "slow consuming age" will render it impossible for him to perform active professional duties.

Doctors are proverbially poor business men. In most instances where competent and industrious physicians become involved in financial difficulties their failure can be traced to lax business methods. We recall the case of a physician in a neighboring city who occupied an eminent place both in professional and social circles. After his death it was found that he had bequeathed to his wife and children all the money which was owing him for professional services, which he estimated to be about forty thousand dollars. When his accounts were examined it was found that there was no specifications as to what certain charges were made for, in many instances the parties had not received bills for several years, and his account books were in a generally hopeless condition. His widow and children received fifteen hundred dollars from the estate which he had valued at forty thousand dollars.

Another primary cause of financial failure with many physicians is their lack of appreciation of the value of their own work. The laborer is worthy of his hire, and professional

skill when faithfully applied *has* a distinct market value, just as the labor of a lawyer, a banker or a shoemaker has a market value. If the physician himself underestimates the value of his services, his patients are liable to do the same. Having decided upon a fee which is just and reasonable under the circumstances in which he is situated, the physician should expect patients who are financially able, to pay the fee without complaint or without any discount. He should earnestly endeavor to make his services worth the fee charged and accordingly expect to receive the full fee. He should not treat John Doe, who never pays his bills, gratuitously, simply for the purpose of holding the family of his brother who is a paying patient. Neither should he treat other individuals free of charge because they "talk him up" in the community and because he fears to offend them by insisting on the payment of his bill.

While such methods are widely practiced and at first glance would appear to be good policy, an analysis of them shows that they are based on bad business principles. No up-to-date business man would attempt to conduct his affairs on such a basis. If a physician has given a patient the worth of his money, as he is bound to do, he is under no obligation to treat his brother or any one else connected with him free of charge, and in the long run solid merit will do more to establish a physician's reputation in a community than the talk of "grafters" who love him only because they can use him.

These statements do not refer, of course, to the free treatment of the worthy poor. Every physician should be willing, when the occasion demands, to render his services gratuitously to the sick who are too poor to compensate him. Where services are thus rendered the patient should be made to clearly understand that a bill is not presented for purely charitable reasons.

Under the old English Common Law physicians were not permitted to enforce payment for services rendered. Any fee the patient paid was purely gratuitous. In Pennsylvania, and in most of the other states of this country, physicians have always had a legal right to charge for their services.

When an individual summons a physician, the law implies on the part of the patient an obligation to pay a reasonable sum for the services rendered. As the mere employment of a phy-

sician creates a liability it follows that if the physician is sent for and promptly responds and is informed that another physician is in attendance or that the trouble has ceased, he will be entitled to the ordinary and reasonable compensation for making the call.

The amount of the fee which a physician can legally collect depends upon the character of the services performed, the financial circumstances of the patient and the custom of the locality. Commenting on this point Taylor says: "In short, the amount of fee which a physician or surgeon is entitled to charge is governed in the case of ordinary and usual services by the generally recognized custom prevailing at the time and place where the services are rendered, or, if he is called from a distance to perform such services then by the custom prevailing in this community. But in case of unusual or peculiar services no such general custom will rule; all of the attendant circumstances must be taken into consideration and a fair and equitable amount thereby determined upon. A more definite and certain rule than the above cannot be well given." In case of a bill against the estate of a deceased patient the courts have decided that the ability of the estate to pay, as well as the amount of service rendered, must be taken into account by the physician in presenting his charges.

When the attending physician calls in a consultant with the consent and acquiescence of the patient, the patient becomes liable to pay for the services rendered by the consultant. If it is not possible to secure the consent of the patient on account of the seriousness of his condition or some mental aberration and other members of his family cannot be consulted, the law implies the authority on the part of the attending physician to call in a consultant if he deem it necessary, and the patient or his estate becomes obligated to pay a reasonable sum for the services of the consultant.

The proof of services rendered to patients is a very important matter when the physician's bill is contested. If the patient is alive and in sound mental condition, the physician can testify to the character and value of the services rendered. If, however, the claim is against a patient of unsound mental condition, or against the estate of a decedent, the physician is not permitted to testify. It thus becomes important to present written evidence of the services he has rendered. If the physi-

cian has kept no accurate book of accounts and is prevented from testifying because of the death or unsound mental condition of his patient, his ability to recover a fee is a matter of very grave doubt. It is just in this matter that many practitioners of medicine are very lax and a large percentage of physicians make use of inaccurate and unintelligible methods of keeping their accounts. This leads to constant losses on the part of the physician and is the source of many misunderstandings with his patients. It will be of practical value to state the qualifications necessary before a physician's account can be admitted as legal evidence. Porter has summarized them as follows:

1. The book must be regularly kept and a usual book in which to keep accounts. The entries must be made in a regular way and at the time the services are rendered. What is sometimes called a physician's "visiting list" is not such a book and is not admissible in proof of services rendered. But it has been held that entries made by a physician's clerk from memoranda are admissible in evidence.

2. The charges must be specified, itemized and not lumped. When services are rendered, different from such as are incident to a regular visit and for which a specific charge is made, the full nature of the services should be set out. When an operation is performed, it should be entered in the book not in general terms, but with some particularity. On the other hand, a charge for medicine has been held sufficient without specifying its character and quantity.

3. The entries must be self-sustaining, that is, sufficiently clear to be understood without the use of a glossary (without unintelligible abbreviations or hieroglyphics), and full enough to disclose the nature of the entries without resort to oral testimony by way of explanation.

4. The value of the services must be set forth and the charges entered opposite each of the items. This charge is not conclusive, but is *prima facie*, proof of the value.

5. The character of the entries must be such as to disclose an intent to charge, as distinguished from a casual memorandum. These requisites to the book are essential.

While we believe that the greatest compensation which a physician can receive for his labors is the satisfaction derived from the relief of distress and the conquering of disease, nevertheless the business side of his professional career is one of

practical importance and since it must be attended to, it were better that it should be done accurately than otherwise. Experience has led us to the opinion that the closer a physician adheres to good business principles in his dealings with his patients, the more satisfactory and more lasting will be the relations between them.

THE QUALIFICATIONS AND PRIVILEGES OF PRACTITIONERS OF OSTEOPATHY.

WE have previously referred in these columns to the inefficiency of the state medical laws in preventing unqualified persons from publicly and openly pretending to diagnose and to treat the sick for financial compensation. This, we believe, is the only possible reason for such laws.

The following clipping from a New York paper is of interest in relation to this point:

"Osteopathic doctors of this city are greatly encouraged over an elaborate dissenting opinion which Justice Deuel, of the Court of Special Sessions, has filed in the case of an osteopath against whom the County Medical Society had secured a conviction and a \$50 fine for practicing medicine without a license.

"The Justice was able to see validity in the contention that nothing is 'the practice of medicine' except the administration of drugs. It is his opinion that a man may advertise himself as a doctor, may hold himself out to the public as competent to diagnose and treat every malady from which human kind suffers, and may take such fees as patients choose to pay; but if he refrains from giving drugs he is not a practitioner of medicine, and does not come under the law which insists that doctors must have a reasonable minimum of special education for their work.

"The convicted osteopath, Justice Deuel declares, did not, in the case under consideration, do what a doctor would have done; therefore, he should not be punished and should not be restrained from continuing to do what he did.

"As a result of Judge Deuel's opinion, the New York osteopaths intend to get together and fight for recognition in the highest courts in the State."

Under such a decision as this a practitioner of osteopathy is entitled to solicit patients, to diagnose their ailments, to use

dietetic, mechanical, electrical, and hydrotherapeutic methods of treatment and to *perform any surgical operation*, provided he does not use an anæsthetic. If we accept the views of many of our allopathic brethren, who consider drugs of little value in the treatment of most infectious diseases, such unqualified persons would be perfectly justified in undertaking the treatment of typhoid fever, small-pox, tuberculosis, measles, yellow fever, etc. Under such an interpretation of the law, also, there is nothing to prohibit osteopathic or any other unauthorized persons from practicing obstetrics, a department of medicine in which drugs are comparatively seldom necessary.

The question we would like to raise for the consideration of the worthy Justice who has rendered this opinion is: Why continue any longer the farce of a law whose object is to insure that those persons who publicly practice healing arts on the sick shall demonstrate their qualifications to do so, but which in reality is only a tax and annoyance to graduates of medical colleges and permits anyone who may desire to treat and to assume the responsibility for the lives of their patients and the safety of the community, merely on the pretence that they do not utilize one branch of general modern therapeutics.

THE SPIROCHAETA PALLIDA AS THE CAUSE OF SYPHILIS.

THE etiology of syphilis has been a problem which has puzzled mankind since the dawn of history. A vast amount of time and energy has been spent in the effort to discover the *contagium vivum* of this disease which is at once so contagious in its character, so baneful in its effects and so widespread in its distribution.

As early as the sixteenth century it was recognized that the disease was infectious, and after the discovery of bacteria by Leewenhock in 1675 the "animalicule" theory of syphilis was generally accepted. In 1885 Lustgarten claimed to have discovered the bacillus of syphilis. Later experiments showed that the organism he described was identical with the smegma bacillus and had no etiological relation to syphilis.

Renewed interest was aroused in this important subject by the announcement made by Schaudinn and Hoffmann in March, 1905, that they had discovered the specific cause of syphilis to be a spiral organism which they named the *spirochaeta pallida*. This organism they first found in the tissue-

juice of a secondary syphilitic papule. The *spirochaeta pallida* is described as being a thin, spirally twisted, thread-like micro-organism, from four to fourteen micromillimeters in length. The spirals are regular and deep, and vary in number from three to twelve. The organism is capable of a wave-like motion, but possesses no flagellae. Owing to its lack of color, and poor staining qualities, the *spirochaeta pallida* is very hard to see. It is an animal parasite—probably a protozoan. Occurring with this parasite there is found a larger, darker organism, the *spirochaeta refringens*. This latter organism occurs in non-syphilitic lesions also.

In order to demonstrate the *spirochaeta pallida* the surface of a chancre or skin lesion should first be cleansed with normal salt solution. Then scrape the lesion with a scalpel until the serum oozes out. This is mounted on a slide and stained for thirty minutes with Giemsa's Azur-eosin. When thus prepared the parasites are identified by their size, the number of spirals and their pale color.

The first studies of Schaudinn and Hoffmann covered twenty-six cases. They were able to demonstrate the *spirochaeta pallida* in every case. It was found in the deep layers of the primary chancre, in the inguinal glands, in the liver, spleen, and in the skin lesions. It was also found in the liver and spleen in cases of congenital syphilis.

Other investigators have repeatedly confirmed the truth of these statements. Metchnikoff and Roux inoculated apes with syphilis and found the specific organism in the initial lesions of four. They express their belief that its presence is diagnostic of syphilis. Metchnikoff states that syphilis is a chronic spirillosis due to the *spirochaeta pallida* of Schaudinn, is pathogenic to the human race, to the anthropoid apes and to certain varieties of inferior monkeys and apes.

If, as there seems to be every reason to believe, the specific etiological organism of syphilis has at last been demonstrated this must rank as the greatest discovery in modern pathology since the discovery of the tubercle bacillus by Koch in 1880. Whether it will prove of any aid in the therapeutics of syphilis is difficult to say, but it will certainly be of assistance in the diagnosis of that disease and will enable us to formulate more rational and more effective measures to prevent the spread of that ubiquitous scourge.

GLEANINGS.

GRAVE'S DISEASE AND PARATHYROID THERAPY.—James J. Walsh, M. D., Ph. D., relates the general care of these cases, and the disappointing results that have followed the various therapeutic discoveries for cure of this disease. When organotherapy became the fad of the hour, it was thought that the key to many mysteries in therapeutics had been found. Accordingly the use of the thyroid substance, and extracts of the thymus gland were used without any material effect upon the symptoms of Grave's disease.

At this period the experimental work upon the parathyroids was being done, and the effect of their removal and appearance of symptoms quite identical with those of Grave's disease noted. This fact led the author to the use of the parathyroid extract in these patients. He reports the following. The first a sufferer from a well-marked, but not severe form of Grave's disease. The dose given was 1 grain three times a day. In about three weeks there was a marked subsidence in the symptom, patient considered herself well and passed from observation. The remedy was next tried in an incomplete case, exhibiting rapid heart, sense of fullness of neck, fine tremor, no exophthalmus or visible goiter. The same dosage was used, and a practical cure followed. As to the permanency of the cure, he does not state, as these symptoms were intermitting in their type and not continuous, but for the time being marked relief was obtained. The remaining two cases reported, were of the more severe type, in which the remedy seemed to do no good. After a continuation of the parathyroid extract in doses of one grain three times a day for four weeks, after which time there was a perceptible increase in the symptoms, though at the beginning there was some apparent improvement. In one, a slight increase in the dose led to the symptoms apparently of thyroidism, suggesting that a small portion of the thyroid had been included. In conclusion he states that he does not think that parathyroid extract produces any benefit in cases of Grave's disease, and that if employed in large doses, even for a few days, or in small doses for many days, it will produce an exacerbation of symptoms not unlike those which are produced by the ingestion of a certain amount of thyroid extract. The cases are entirely too few to draw any definite conclusions, and that he cannot get away from the thought that there might have been some slight admixture of the thyroid substance which would vitiate all the results, and conclusions.—*American Medicine*, May 20, 1905.

G. MORRIS GOLDEN, M. D.

A STUDY OF THE GASTRIC CONTENTS IN TWENTY-ONE CASES OF TABES. IN THREE CASES DURING THE GASTRIC CRISES.—M. P. Smithnick, M. D. In a paper upon this subject he states the various theories that have been advanced to explain the gastric crises, some central and some of peripheral

origin. According to Sahli, a good number of the crises are dependent upon hypersecretion with hyperacidity. Similar conclusions have been reached by other observers, and there seems to be no fixed rule as regards the acidity in these affections. Eward in a series of 37 cases found hyperacidity in 9, normal acidity in 9, and hypoacidity in 19, and in one case during a crisis, the H Cl. was absent.

He then follows with the report of the examination, and analysis of twenty-one cases, describing the methods used, and concludes his results in a tabulated form, and the following conclusions: 1. In *Tabes* gastric motor power and H Cl. and pepsin secretion are depressed more commonly than exalted. 2. No degree of activity of these functions characterizes *tabetics*. 3. In gastric crises of this series H Cl. secretion and motor power were more depressed than usual, and in the severe painful crisis depression of acid secretion was extreme and continued for hours. In one case there was probably hypersecretion of gastric juice.—*Boston Medical and Surgical Journal*, December 7, 1905.

G. MORRIS GOLDEN, M. D.

THE PARATHYROID GLANDS IN GRAVE'S DISEASE.—Lawrence Humphrey, in *Lancet*, of November 11, 1905, states that in view of the severe symptoms which are likely to follow the removal of the parathyroids in animals, that attention should be directed to these glands, in fatal cases of Grave's disease, myxœdema, tetany in children, and operations upon the thyroid, and that a thorough examination of them be made. As to experimental evidence, there is a general agreement on the chief issues which may be summarized as follows: 1. Removal of the parathyroid glands together with the thyroid produces in a large number of cases very acute symptoms and a fatal result. 2. Removal of all four parathyroids, the thyroid being left intact, produces the same acute symptoms, but with a less frequently fatal result. 3. Removal of the thyroid alone, leaving the parathyroids is followed by chronic symptoms of myxœdema and by trophic lesions. The acute symptoms following the removal of one or both sets of parathyroids consist mainly of the following: Tremors, a slow and unstable gait with contractures of limbs, emaciation and muscular weakness, tachycardia, vomiting and diarrhoea, scanty urine with albuminuria, attacks of dyspnoea followed sometimes by tetany and convulsions, and death. He then relates two cases of the fatal acute form of Grave's disease and also two cases of the more chronic form, in which the parathyroids were examined. The parathyroid glands in the acute forms showed extensive infiltration with fat between the columns of gland cells, in fact the gland tissue was largely replaced by fat. Of the more chronic cases the fat infiltration was marked in one, and the other showed scanty infiltration, with cell changes significant of fatty infiltration. The method is then described in detail of how to find the parathyroids, followed by an anatomical and histological description of them.

His experiments were not only confined to the examination of the parathyroids in Grave's disease, but to determine whether they were pathological of that disease or not, he reports an examination of the parathyroids in 18 cases of death from various causes—namely, accident, tubercle, pneumonia, Addison's disease, vulvar paralysis, Bright's disease, diabetes,

leukæmia, cancer, convulsions, and old age. In 12 cases, which were between the ages of one and fifty years, the gland was compact and free from fatty infiltration. Of the remaining six cases whose ages were from 50 to 72 years, four showed well marked fatty infiltration of the parathyroids. The one most affected was from a case of diabetic coma in a man aged 60 years.

He concludes by saying that it would be premature to regard this disappearance of gland tissue, and its replacement by fatty tissue as a pathological feature of Grave's disease, or as associated with the severe symptoms in these fatal forms of the disease, but the parathyroids may have some specific function in relation to the thyroid gland and its secretion, and if it can also be proved that pathological changes occur in the gland in persons dying from Grave's disease, it would have an important bearing upon the acute toxic symptoms in this complaint.

G. MORRIS GOLDEN, M. D.

AXILLARY AND PECTORAL CICATRICES FOLLOWING THE REMOVAL OF THE BREAST.—Untoward or undesirable sequelæ following mammary amputations and axillary dissection may be classed as follows: 1. Fixation of arm to chest with more or less limitation of motion. 2. Venous stasis in the arm and forearm, with œdema. 3. Lymphœdema of the arm and forearm (pseudœlephantiasis). 4. Neuralgia in arm and forearm. 5. Sensitive retracting scars.

The causes of these results are: (a) Line and position of incision. (b) Excision of the skin. (c) Exposure of veins, arteries, and nerves in the operation and leaving them exposed in the excavated axilla, without muscle or aponeurosis covering, as they become involved in the cicatricial mass which must fill the cavity. (d) Malposition of the arm immediately after operation—i. e., approximated to the chest wall, either for support or to lessen tension on the flaps. (e) Allowing too great a dead space to exist between the apex and base of the axillary triangle during the process of repair. (f) An absence of accurate contact of all wound surfaces in the axilla immediately after operation. (g) Recurrence of the carcinoma in the axilla or subclavicular space.

The line of incision is of great importance, and the worst results are obtained when it is made along the anterior axillary border, and next when the central axillary line is used. The best incision is one high upon the chest wall and rectangular; the apex of the incision is just beneath the acromion process, the inner limit parallel to the fibres of the pectoral, and the outer parallel to the long axis of the humerus.

In the early stage of carcinoma the skin is not often involved, particularly where the carcinoma is deep in the glands and not at all attached to the skin. But if it is, the line of the incision must be accommodated to the extent of the excision of the skin demanded by the pathological condition, and semi-circular flaps rolled from the chest, back, or shoulder, should cover the denuded area. These should never be united to form a straight scar at the anterior axillary line.

An effective dissection of the axilla can not be made without exposing the axillary artery and vein and the brachial plexus. If these structures are allowed to adhere to the chest, wall, or skin, or be surrounded by newly

formed connective tissue, there is always a neuritis (neuralgia), with venous and occasionally arterial stasis. The evil results of the axillary excavation can be readily overcome by using a portion of the pectoralis major to cover these structures, or all of the pectoralis minor, or a portion of the latissimus dorsi, with its fatty covering, or even the subscapularis. The lower part of the pectoralis major is the best muscle to use. Its aponeurosis should be removed with the breast, as the aponeurosis and not the muscle carries the lymphatics, in which metastases occur. A flap two and one-half inches wide should be left attached to the humerus, and after the axilla is cleaned out, it should be drawn across the artery, nerve, and vein, and fixed at the apex of the axilla, covering the anterior and inferior surfaces of these structures.

When the wound is closed the arm is dressed at right angles to the body. It is held in place by an axillary cast extending over the side of the chest and out over the arm to the elbow. The position is not uncomfortable, as would be imagined. In fact, the patient suffers less pain than when the arm rests against the pectoral wall. This cast also supports the base of the axillary triangle and approximates it to the apex. If a dead space be permitted to exist in the axilla, the contraction of its wall will draw the structures in the line of least resistance to fill the space. When the floor of the axilla is a long way from the apex the line of contraction is between the ribs and the humerus. This can only be avoided by approximating the base and the apex of the triangle in the days immediately following the operation.—John B. Murphy, *New York Medical Journal*, January 6, 1906.

J. D. ELLIOTT, M. D.

A NEW SUPPORTER AND POUCH FOR THE AFTERTREATMENT OF ARTIFICIAL ANUS.—Four years ago, John H. Gleason found there was no apparatus especially arranged for use in case of artificial anus. He has since perfected such an article, and says it will hold a large or small amount of fæces, does not leak material or odor; is easily cleaned and deodorized; and acts as a supporter of the abdominal wall; thereby overcoming the tendency to hernia. It consists of a hard, vulcanized rubber ring, to which are attached a pouch and circular and perineal straps. The ring has a slightly convex articulating surface, one quarter of an inch in width, adapting itself with moderate pressure perfectly to the skin, thus making it air-tight. The ring is one inch in thickness, which allows sufficient space between the opening of the artificial anus and the anterior surface of the pouch to permit fæcal matter to pass freely forward and downward.

The pouch is made of rather thick, pliable rubber, and it and the straps are cemented firmly into the concave rim of the ring. The total diameter of the ring is three and three-quarters inches, the diameter of the opening into the pouch being two and one-quarter inches. The perineal straps are of heavy elastic rubber. The body straps are also made of rubber, but have ends of cotton webbing to facilitate buckling. From the illustrations and description, any manufacturer should be able to construct one at a moderate cost.—*Medical News*, December 16, 1905.

J. D. ELLIOTT, M. D.

OBSERVATIONS ON DIONIN.—Dionin, having been rather obscurely before ophthalmologists during four years, is still not widely known, many prominent in the profession not using it at all, or if using it, giving it only casual mention. The writer has used dionin two years and finds for it an exceedingly useful but limited field. The drug should be used with patience, and not condemned upon a single unsuccessful trial. It occurs to me that some of dionin's most enthusiastic adherents (Darier, of Paris, and Hinshelwood, of Glasgow,) have brought the drug into partial disrepute by straining its range of satisfactory usefulness, and advising it where other agents less alarming are quite equally efficient. In episcleritis, keratitis, iritis, and iridocyclitis, holocain affords satisfactory analgesia with no startling edema. Darier warns against placing the solution immediately in contact with the cornea, and drops it in the lower cul-de-sac. In my hands, however, it has produced the same enormous edema and inflammatory condition; because at the patient's first wink, the drug is as completely spread over the cornea as though placed directly upon it, and the excess allowed to gravitate to the cul-de-sac. Within ten minutes the eye is intensely injected, and the cornea is partly submerged by the overhanging edematous conjunctiva. This very annoying feature, together with the brief length of time the drug is effective (2-3 days) lessens its attractiveness to those inexperienced in its use.

However, there are two general conditions in which no other drug can compare in results. One is the various degrees of corneal opacities from recent keratitis, and that of hemorrhage into the conjunctiva or into the anterior chamber. Hemorrhage into the conjunctiva from blows on the eye, or from straining is rapidly absorbed in the sharp reaction incident to its use.—Dr. Charles M. Steele, *Annals of Ophthalmal*.

WILLIAM SPENCER, M. D.

THE EYE SYMPTOMS OF HYSTERIA, NEURASTHENIA AND THE TRAUMATIC NEUROSES.—The states which give rise to the symptoms are first, the cornea and conjunctiva may be anesthetic and hyperesthetic; second, the eye muscles may be relaxed from fatigue, or be in a state of spasmodic contracture; third, the visual perceptive apparatus may show signs of fatigue while there may be also psychical perversions of visual perceptions. The patients complain of pain, paresthesia, clouds or bright spots, and change of size of objects seen. There may be a tremor of the lids when the eyes are closed, lacrimation and photophobia.

There is often a lack of balance of the extrinsic muscles, or there may be a spasm which causes diplopia. Uniocular diplopia is sometimes present and is a valuable diagnostic sign. Anomalies of the visual fields are the most frequent and most characteristic eye disturbances in hysteria and neurasthenia. The color fields are sometimes very bizarre and then the diagnosis is easy.—Dr. Ward A. Holden, *Annals of Ophthalmal*.

WILLIAM SPENCER, M. D.

EYE-STRAIN AND THE PSYCHOSES.—The author defines eye-strain as consisting of two kinds of straining. In one case it is the automatic effort of the mid-brain and oculomotor nerves to adjust the eye in such a way as to overcome abnormalities in refraction, accommodation and imperfect mus-

cular balance. The other occurs when the eye is more seriously defective or the receiving apparatus of the brain is fatigued. Regarding its connection with the psychoses he says that after sixteen years of watching he has hardly found any cases in which eye-strain was an important and direct factor in establishing even a minor psychosis, though it modifies its symptoms and secondarily adds to the disturbance. The visual function is largely automatic and spinal, and when the mind is a good mind, the visual machinery does not overthrow or directly or seriously affect it. When the mind is unstable, or the body weakened, cerebral eye-strain may do some harm, but eye-strain does not form the background of most pathological conditions.—Charles L. Dana, *Annals of Ophthalmal*.

WILLIAM SPENCER, M. D.

LAWS OF HEREDITY AND CONGENITAL VARIATION IN OPHTHALMOLOGY.—Attention should be called to the fact that ophthalmology offers an important and promising field for studies of the laws of heredity. The author refers to the tendency exhibited by the tissues of the eye to adhere strictly to type, in their development and in their resistance to accidental influences. Already enough has been observed to warrant the supposition that, in the eye, departures from the normal type are themselves apt to be typical. Take the well-known facts regarding congenital defects of color perception. The similarity of the disability in enormous numbers of cases, and the tendency to descend to grandsons, through the daughters only, are strongly typical. Such typical instances would seem to promise most for an elementary knowledge of the laws of heredity—those laws which have the widest and deepest importance for the sociology of the future. It must be mentioned, however, that this law of descent through the female to the male does not apply universally. We have in ophthalmology enough groups of exceptions to quite limit and define its scope.

The range of ophthalmic observations already available in this direction is a wide one. The congenital anomalies of the eye and the individual peculiarities it may present, as to color of iris, pigmentation of the eye-ground, distribution of vessels, and especially anomalies of refraction, as well as the ocular diseases, have been well worked out, and they are capable of comparatively exact notation and record. Statistical studies regarding them, extending over family or race groups, can be relied on as giving facts of definite value. There are already accumulated many observations of great interest in this connection. The reversion to an ancestral type of pigmentation, in retinitis pigmentosa, the striking condition of amaurotic family idiocy, the predisposition of the Hebrew race to glaucoma, and of the negro to phlyctenular disease, and the comparative freedom of the latter from trachoma, lacrimal obstruction and strabismus, are instances of a long list of ophthalmic facts that will help to reveal laws of congenital variation and heredity.—Dr. Edward Jackson, *Annals of Ophthalmal*.

WILLIAM SPENCER, M. D.

THE VALUE OF THE LEUCOCYTE COUNT FOR THE DIAGNOSIS AND TREATMENT OF GYNECOLOGICAL DISEASES.—Neumann (Vienna) examined 84 cases in Chrobak's clinic, and concludes: 1. Inflammatory processes of the

adnexa and parametrium accompanied by purulent exudation mostly show a leucocytosis in the progressive state. 2. The leucocytosis disappears in a relatively short time when the process becomes encapsulated or localized, so that at the time the patient comes under observation, the leucocytosis may not be present. 3. Leucocytosis may also be absent in the acute stage of suppuration if there is not much tendency to spread; it is absent in cases of defective reaction of the organism in weakened individuals. 4. When a pus collection (parametric, tubo-ovarian abscess, or abscess of the pelvic connective tissue) is present, an existing leucocytosis disappears with the emptying or resorption of the exudate, more slowly than does the temperature, and this is probably an indication of a partial retention of pus. After complete discharge of the pus the number of leucocytes diminishes and the temperature with it. 5. Leucocytosis over 15000 almost certainly indicates the presence of pus (when pneumonia may be excluded); when the number is between 11000 and 15000, and this remains constant, it is suspicious without being conclusive. 6. Ectopic pregnancy immediately after abortion or rupture may be accompanied by moderate leucocytosis like that following hemorrhage. 7. Torsion of the pedicle of a cyst appears to be accompanied by a decided leucocytosis. 8. The benign growths, cysts, myoma, dermoid, do not cause leucocytosis. 9. In malignant growths, carcinoma, sarcoma, cystoma, there is at times a moderate increase of leucocytes, especially with existing ulceration or necrosis, as the expression of a hydremic cachectic leucocytosis. 10. The absence of leucocytosis does not exclude the presence of pus.—*Abs. in Zentralbl. f. Gyn.*, 1905, 415.

THEODORE J. GRAMM, M. D.

THE ETIOLOGY OF FLOATING KIDNEY.—Longyear (Detroit) in an article on this subject says the condition of nephroptosis has been the subject of much thought and speculation for many years, and its etiology much discussed. But the fact that 85% of all cases occur in women, and that fifteen kidneys on the right side to one on the left become movable, and that the left kidney is almost never singly displaced, and when it does become displaced, gives no such serious symptoms as are attributed to the right sided displacement, are circumstances which have never been satisfactorily explained. When operating a 16 year old girl for appendiceal disease, the writer accidentally discovered that the kidney which was normally placed, could be easily pulled down and held in a firm position of complete prolapse, by making traction upon the cæcum. This led to further observations both on the cadaver and the living subject, and later to efforts to devise an operation that would retain the kidney in its normal position as well as anchor the ascending colon so that prolapse of the cæcum and further traction on the kidney and on the duodenum and renal vessels, would not occur. With this object in view he operated a case by entering the peritoneal cavity through the usual incision in the loin, and gathered up the redundant mesentery and attached it to the incision of the fascia close to the twelfth rib at the upper angle of the wound. In this case the ease with which this could be accomplished and the results, were encouraging. In the second and third cases, however, in which the displacement

was less pronounced, there was practically no redundant mesentery; but while drawing out the peritoneal attachment, the operator noticed a cord-like structure passing downward from the lower pole of the kidney, which prevented the separation of the kidney and bowel, and this was included in the peritoneal tissue and attached with it. The text-books furnish no information of this ligamentous structure, but on making dissections the writer was able to demonstrate the tendinous attachment, which he found composed of fine longitudinal fibres from the fibrous network which forms the framework of the fatty capsule of the kidney. This fibrous ligamentous structure is probably the tissue left in the track of the ovary or testicle in its descent from its place of origin in the Wolffian body, high up near the kidney. A specimen showing this phrenocolic ligament is illustrated. The existence of this ligament and the effect upon the kidney and bowel because of the traction induced by the performance of the function of the latter would explain the digestive and nervous symptoms often seen. If the contention of the writer is correct the surgical therapeutics must be altered to meet these conditions. That this has not been done heretofore is believed to explain the lack of success in relieving the symptoms in a large proportion of cases.

In reading this article the thought will doubtless suggest itself to the gynecologist that here is another condition induced by defective bowel function in women, a condition which underlies so many non-infective diseases in women; and the question also arises whether a closer attention to this matter might not also act beneficially in prevention.—*Amer. Jr. Obs.* Vol. LII, 625.

THEODORE J. GRAMM, M. D.

THE TREATMENT OF SEPTIC PUERPERAL CONDITIONS OF THE UTERUS.—Sitsinsky says there is complete uncertainty in the treatment of these conditions. Some writers, depending upon the recuperative powers of the system, advise an expectant treatment and only intervene when threatening symptoms arise. Others advocate radical treatment on the first day, while a third group would only operate much later. The sort of operative procedure is also various. Under such conditions what is the non-specialist to do, and whose advice shall he follow? In order to solve this question it is well to examine the underlying principles which should determine a correct treatment; and to do this we should recall in what manner the processes of infection declare themselves. At first these processes have mostly the character of a localized disease. At the point of infection the bacteria multiply with remarkable rapidity and spread over adjacent surfaces, but soon they also penetrate the deeper tissues. During their proliferation toxins are generated, which are powerful poisons to the living organism. Now since after delivery the inner surface of the uterus, with its numerous patulous veins and lymphatics, closely simulates an open wound, it follows that absorption takes place here in accordance with physiological laws. It is to be expected therefore that the system would in every instance be rapidly overwhelmed, and this would actually occur, were it not for some further facts; for while the surface layer dies in consequence of being infected by bacteria, the next layer experiences an inflammatory exudation, or there is formed a "granulation wall" as the Ger-

mans have called it, which interposes certain obstacles to the entrance into the system of bacteria and toxins. Bumm has closely studied these conditions and admirably portrayed them. There come into play also those processes of cellular activity which Metschnikoff has denominated phagocytosis. Another related fact should be mentioned, namely, that all bacteria do not possess the same power of penetration; thus Widal has shown that streptococci are able to penetrate this granulation wall while others are not; and Klein has demonstrated that putrefactive bacteria meet an insurmountable barrier by this same granulation tissue. These facts explain in a measure the clinical course of puerperal infections. But it might be deduced from the above that a general infection by putrefactive germs could not occur, and this may be true with reference to their entrance by way of the lymphatics, but not by way of the blood vessels, for putrefactive germs may disintegrate venous thrombi and thus enter the system. The conditions which favor absorption from the uterine cavity are impaired involution of the uterus; retention of secretion; and impaired vitality as after great loss of blood or serious disease.

From the foregoing we may conclude that the principles underlying correct treatment, are: 1. That the granulation wall must be retained and not disturbed in any of its parts. 2. That the functional activity of the leucocytes must be favored, and this may be done by diminishing the bacteria and toxins and by drainage. 3. That all conditions which favor absorption from the uterus should be removed, such as improper position of the uterus; uterine contraction should be facilitated and the general recuperative powers stimulated. The method pursued by Sitsinsky conforms to all these requirements. It consists in

- a. Irrigation of the uterine cavity with about one liter of sublimate solution 1 to 1000 during one or two minutes;
- b. Followed by irrigation with sterilized water or boric acid solution of about 112° Far. temperature;
- c. Drying of the uterine cavity by means of a strip of sterilized gauze;
- d. Irrigation of the uterine cavity with 90% alcohol;
- e. loose packing of the uterine cavity with a strip of sterilized or iodoform gauze for drainage. This gauze after being introduced dry, is saturated with 90% alcohol by means of a special irrigator.

The results of this treatment have been as follows: Among 3,147 deliveries and abortions during two years there were 246 septic infections, of which none died. The average duration of fever was five days. In only four cases was there a chill after the treatment. Treatment is begun on the appearance of the first signs of infection and repeated until the discharges have a normal appearance.—*Monatssch. f. Geb. u. Gyn.* Vol. XX, —640. (This treatment is not altogether new in America. Essentially the same procedures were suggested a number of years ago by a physician residing in the South (reference not now available), and since that time I have used with pronounced success in a number of consultation cases. T. J. G.)

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

ECHINACEA AUGUSTIFOLIA.—Most of us have had at least a little experience with *Echinacea Augustifolia* and believe it to have much value in combating septic conditions. Dr. Finley Ellinwood (*Chicago Medical Times*) considers *Echinacea* of greater value than any single remedy now known in such conditions. *Echinacea* is valuable in diseases that arise from bacterial infections. Many claim benefits from its use in typhoid and typhus fevers, diphtheria and malaria. Especially does *Echinacea* effect boils, carbuncles, cancerous and erysipelatous conditions.

Dr. Horace T. Dodge, in the *Homœopathic Recorder*, says it has also been recommended in scrofulous and syphilitic affections, eczema and many obstinate skin, bone and blood affections. In wounds of poisonous nature, caused by the introduction of virus of serpents and insects into the blood it has been used with good results. It is also said that hydrophobia has been cured and prevented by its use.

If you can get a good reliable preparation of the *Echinacea Augustifolia* and use enough of it (at least several gtts., of the tincture t. i. d.) you will be pleased with the results.

ASCLEPIAS TUBEROSA.—It is probable that some of us are more familiar with the name than with the symptoms of this drug. The common name, *Pleurisy Root*, indicates its most common sphere; acting principally in a subacute manner upon the mucous, as well as the serous tissues, especially of the respiratory organs.

A writer in the *Medical Brief* claims that in those conditions where the skin is hot and dry, and all the secretions stopped, that 15-20 drops of the tincture should be given; "and that you will be astonished, amazed and wonderfully pleased at the results." The same author states that it is infinitely more scientific to experiment a little than to stick to the usual routine of a few drugs, especially when improvement is slow or absent.

It is a deplorable fact, yet nevertheless true, that so long as we persist in this incessant routine in our prescribing, we are hindering very decidedly any therapeutic advance.

PHOSPHORUS IN CHRONIC DISEASES.—Phosphorus is an exceedingly important remedy. Like other remedies of this type it is quite frequently overlooked. It especially influences conditions in which the tendency is to become more severe unless phosphorus is administered. Conditions

indicating phosphorus are rarely or never "idiopathically" cured. To have confidence in a drug one must first *know* the drug..

Dr. G. W. Harvey (*California Medical Journal*) "cured a man of pruritis ani with phosphorus, who had tried all sorts of sure cures for blind, bleeding and itching piles without more than temporary relief. The constant moisture of the parts was present in this case." The doctor also suggests phosphorus as a preventive for nausea following chloroform anæsthesia. As a prophylactic measure he gives phosphorus 3x, ten drops, aqua dest, q. s. to four drachms, teaspoonful of the mixture before giving the chloroform, this generally preventing the terrible subsequent nausea and vomiting.

We remember that the usual phosphorus nausea and vomiting is from a deep origin rather than an acute one.

Dr. Harvey also mentions the terrible itching and biting in the skin following jaundice. It will also cure the purple hemorrhagic spots on the hands following disorders of the liver. He also reports a case of gall stone colic with severe uterine hemorrhages and intense pains, and passage of polypi every three or four months. Dioscorea, nux and chionanthus gave no relief. Finally phosphorus was given in small doses especially for the hemorrhages, and to the doctor's great surprise all the symptoms cleared up. "Another cure was one of bleeding gums, where there had been a history of a scorbutic taint and there was present also not a little pyorrhœa alveolii, but the phosphorus cured the bleeding perfectly and very materially benefitted the pyorrhœa."

THE RANGE OF ACTION OF THE CORNUS FLORIDA.—There are several species of the Dogwood, but the Circinata and Florida are the only ones proved according to the Guiding Symptoms; while the old school have used the Sericeæ clinically in intermittent fever. It seems that the Circinata has a wider influence over the tissues than the Florida.

Farrington speaks of the Florida in connection with intermittent fever. "This has sleepiness long before the chill; the patient feels chilly, but is warm to the touch; the heat is associated with drowsiness, and is followed by profuse sweat."

The Eclectic Review gives the following: Cornus—commonly called dogwood, boxwood, or large flowering cornel, possesses tonic, stimulant and antiperiodic properties which are often useful. It speedily increases the appetite and augments the power of digestion. It is especially indicated when there are acid eructations and the patient feels dull and drowsy after meals. In enfeebled conditions of the stomach and in abnormal states of the glandular structures of the gastro-intestinal apparatus, cornus exerts an influence which makes for functional activity. It also gives prompt relief from the distress caused by the symptom commonly called "heartburn," and its continued use through its power of giving tone to the stomach and lessening the tendency to fermentation, frequently prevents a return of this very common source of discomfort.

Cornus constitutes an efficient medicament in intermittent and other fevers characterized by periodicity, and it is said to have cured many cases of malarial fever over which quinine failed to exert any apparent antiperiodic influence.

Leading indications are as follows: Relaxed or enfeebled states of the system; general exhaustion; miasmatic fevers; pyrosis; indigestion with stupor, headache and acid eructations; chronic intermittent fever, when nausea and diarrhœa at the end of the paroxysms; convalescing stages of acute disease.

THE EFFECT OF MANUAL MASSAGE ON THE STRUCTURAL DEVELOPMENT OF THE BODY.—Baker. The general effect of manual massage on the structural make-up of the body may be classed under the following divisions: (1) Elimination of the toxins formed in the tissues. (2) Absence of fatigue. (3) Increase in the red blood cells and hæmoglobin. (4) Increase in rapidity of the circulation without a corresponding rise in the tension of the vessels. (5) Increase in the tone of the general muscular system with a corresponding increase in its strength. (6) Increase in the tone of the heart muscle.

On looking over this series of beneficial effects it will be seen that they correspond to those received from exercise in general, but this much can be said as differing from active exercise, we have no resulting fatigue of the body nor increase in the tension of the heart which are very common to violent exercise.

This fact alone places massage at the head of the list in the treatment of conditions where the elimination of waste is to be sought for and where the increase in the tension of the heart is not desired or where it would prove harmful.

TAUROCHOLATE OF SODA IN HOMOEOPATHY.—Dr. I. P. Tessier, in an interesting study of the action of bile and its salts, in hepatic affections, analyzes a number of experiments by leading authorities, with the object of determining this action, and concludes that in the *taurocholate of soda*, homœopathy has a useful remedy against certain forms of hypoglobular anæmia. The claim that its pathogenesis and toxicology clearly indicate its value, and that it should also serve us as a remedy in cases of hypertrophy of the spleen and ganglia. He calls our attention to the fact, that it produces dyspnœa, the Cheyne-Stokes rhythm, acute pulmonary œdema, and intense exaggeration of the cardiac pulsations, offering a good field for clinical studies and experimentation of great interest, which may give fruitful and important results.

In the course of his analysis, he states, that of the processes of auto-intoxication, the icterus is one of the most common, and also one of the most simple and most accessible to study. The poisons, which in the course of icterus, pass into the blood are, in fact, those of the bile, excrementitious fluid, whose constitution has been known for a long time. They are well defined chemical compounds of whose origin we are perfectly informed. On the other hand, the conditions under which icterus is produced in man, are far from being a very complicated pathogenic problem; they have been in a large measure elucidated. Finally, it is useless to insist on the minute analysis made in these last years, especially in France, under the suggestions of Dr. M. Gilbert, of the clinical aspects which cholemia may assume in all its degrees. It would appear, therefore, at first sight, that biliary auto-intoxication should have been, in some way, the

point of departure of all the researches on auto-intoxication in general; for it represents apparently the most pure and less complex type. Experimentally, the mortal doses of the biliary salts and pigments have been determined, but, really it seems that what has made us lose sight of the clinical or experimental syndrome of biliary intoxication has been the almost exclusive attention given to hepatic lesions, during the progress of bile retentions. Biliary retention will always call forth infection. Transitory or prolonged icterus, are sometimes the consequence, sometimes the cause of a microbial angiocholitis more or less pronounced. Since 1840 (Hunefeld, Kuhne) we know that bile is a hemolytic fluid, and as Ranvier, in his *Traite technique d'histologic*, says: "The action of bile on the blood globules is extremely curious; they turn pale at first, then they at once disappear without leaving any trace." In 1844, von Dusch demonstrated that bile owes its hemolytic properties to the biliary salts, *glycocholate* and *taurocholate of soda*. Four years later Rywosch pointed out that the most hemolytic of the biliary salts is the *taurocholate of soda*, which dissolves ox blood in solution at 1-700.—*L'Art Medical*.

E. FORNIAS, M. D.

CLINICAL EXAMINATION OF THE RESPIRATORY EXCHANGES.—Dr. Jousset in *L'Art Medical* of last September extracts from the reports of the *Academic de Medicine*, some very interesting conclusions in regard to the study of the respiratory exchanges in disease, by Drs. Robin and Binet, of Paris. In *typhoid fever* the respiratory exchanges are diminished and this diminution is in proportion with the gravity of the disease. When the patient gets better, the exchanges increase; if he gets well, they increase also and go beyond the normal standard. Consequently, says Jousset, the measure of the respiratory exchanges constitutes an important element for the prognosis of typhoid fever. Dr. Robin thinks, that this state of respiratory chemism in typhoid fever, gives us the key for the *indication of cold baths*, for cold baths increase the respiratory exchanges. Cold baths increase also diuresis and their partisans base on this property the indication of this therapeutic agent. But clinics stripped of artifices, have shown that the methods of Brandt give a mortality of 20% in typhoid fever, what should not be considered a success. Because in the natural course of typhoid fever, an increase of the urinary secretion and of the respiratory exchanges, announce convalescence, one is not authorized to infer that these very phenomena induced by a therapeutic agent, have the same prognostic value. It is a sophism and clinical medicine holds things for what they are worth.

The respiratory exchanges, on the contrary, increase in *tuberculosis*; far from being a *craving for oxygen*, as it is generally believed, the tuberculous wastes and burns up rapidly. On an average, the production of carbonic acid increases 80% in women, and only 64% in man. The total expenditure of oxygen increases to 100% in women and to 70% in men; the amount of oxygen absorbed by the tissues augments to 163% in women and to 95% in men. Hence, the respiratory exchanges are highly increased in tuberculosis. If one remarks that in *arthritic patients*, the respiratory syndrome "is opposite in its totality as in its elements, to that

of consumptives," we will conclude with Dr. Robin, that we ought to declare in favor of the alliance between the two affections. These qualities of the respiratory exchanges are transmitted to the descendants of arthritic and tuberculous subjects. It is, therefore, a syndrome which does not exclusively belong to the actual disease; but rather to a predisposition, to the soil.

Here are the conclusions which Dr. Robin has drawn from these facts: "The progeny, born of parents, one arthritic and the other tuberculous, only have exaggerated respiratory exchanges in the proportion of 36%. The arthritism of one of the parents increases, then, to a third the number descendants not having original predisposition to phthisis."

"The arthritics attacked by tuberculosis are divided in three groups:

"In the *first*, the respiratory exchanges are slightly increased, but the essential elements of arthritic chemism are not altered or affected. In the patients of this group tuberculosis has little influence on the general condition and the tendency is to recovery.

"In the *second*, the features of the respiratory chemism of the tuberculous individual tend to assume form, but some of the stigmata of the arthritic chemism persist yet. Clinically these consumptives have still a relative resistance.

"In the *third*, the respiratory exchanges are very high, without any traces of the arthritic syndrome persisting. Then phthisis evolves with its ordinary gravity."

If we take *en bloc* the statistics of these three groups of cases, it becomes evident that phthisis in arthritic subjects is cured in the proportion of 29%.

"We have then as a result that arthritic individuals who become tuberculous have, in general, less elevated respiratory exchanges than other consumptives; but when due to alcoholism, diabetes, exhaustion, &c., the exchanges of the *arthritic-phthisic*, ascend to the standard of those of ordinary phthisis, for the arthritic loses the immunity he had and the phthisis unfolds in his system as in any other predisposed subjects.

"These facts lend weight to the importance taken by the exaggerated combustions in the constitution of the *tuberculisable soil*, and the therapeutic interest attached to the restriction of these combustions, as well as those predisposed to tuberculosis, as in the confirmed consumptives."—
(Sitting of July the 18th.)

E. FORNIAS, M. D.

HOMŒOPATHIC TREATMENT OF CARCINOMA.—Dr. Picard comments on a paper of Dr. Veith, of Breslau, read before the Homœopathic Central Society, at its meeting in Berlin, on the 10th day of August, 1905, and which was published in the *Allgemeine Homœop. Zeitung*. These are his remarks: "The author commences by giving a summary of the ideas generally admitted on the etiology and pathological anatomy of carcinoma and mentions the difficulties of the diagnosis at the onset of the disease. He gives the statistic results of surgical treatment with very discouraging figures, and speaks, by the way, of the new processes introduced in therapeutics by the Rontgen and Radium rays. The active principle of these irradiations are the ultra-violet rays in which the Rontgen and Radium rays are transformed. They act particularly on the epithelium, causing an in-

filtration of small cells; vacuoles, necrosis of the epithelium, endarteritis obliterans and atrophy of the neoplasm. We do not know if we are dealing with a destruction of the cancerous cells or are witnessing a better defence of the healthy cells against the encroachment, but at any rate, the beneficial action is demonstrated by those superficial cases, situated in the skin and mammary glands. This action does not penetrate more than half a centimetre in the tissues. Some have taken into their heads to introduce by means of a sharp exploring needle the radiant substance. Strebel, of Munich, had the idea of introducing in the stomach, either zinc, lead, bismuth, or paper rendered radio-active by exposing them to the action of radium, and which retained for 24 hours the radiant action. The action of distilled water exposed several hours to the *bromide of radium*, has been also tried, to modify carcinoma of the stomach. Only the future will let us know the real value of these methods.

We have no specific for cancer, and we must let to the surgeons and radiographers those cases where their interventions seem opportune, reserving for us those where the general condition does not permit operation without undue exposure to the patient.

Among the homœopathic remedies *Arsenicum* leads. Its power to modify the corneous thickening of the skin and stir up the occasional transformation of warts into cancrs is well known. Stiegele, in a paper on Cutaneous Cancer, brought forward again the action of *Arsenicum* which gives to the anatomical elements a particular coloration and morphology. Trunczek has demonstrated that *Arsenic* gives to the cancerous substance a color which no other normal tissue can take; the living cancerous cell becomes covered under the influence of this drug, with a brown crust which may turn even black. Dr. Hoffman, in the 143rd vol. of the *Allg. Hom. Zeitung*, mentions a case of gastric carcinoma with apparent tumor, cured by *Arsenicum* 6, taken for a few months; the post-mortem came later to confirm the diagnosis. Next, an advanced carcinoma of rectum which seemed to allow the patient a few weeks of life was cured after nine months of treatment with *Arsenic* 6, alternated with *Belladonna* 3 and *colocynth* 3 to relieve the pains and tenesmus. The cancer dwindled away perceptibly. The patient died at the end of six months from a metastasis to the liver and stomach. A young girl operated for a melanotic tumor of the breast had a relapse, presenting a swelling the size of a small nut, which notwithstanding the employment of *Hadrastis*, *Conium*, *Carbo V.*, &c., remain stationary, which ended by being operated, while it was growing. To prevent another relapse *Calcara carb.* was given; after seven years without relapses, she married and had two children. Compton Burnett prescribed *Arsenic* for all cases of carcinoma, which he combined with constitutional remedies susceptible of increasing the resistance of the normal cells to the cancerous invasion. Windelband published a case of labial carcinoma cured by *Arsenic*. Next in importance comes *Hydrastis canad.*, particularly useful in cases of scirrhus, especially in young and elderly women. It relieves the pain promptly. This somewhat benign tumor allows patients to survive from 15 to 20 years. Pfander and Schlegel have reported cases of cancrs and carcinoma markedly improved. *Lycopodium*, 30 and 200, according to Mattes, cured a case of carcinoma of the rectum. D. Müller

mentions three cases of carcinoma of lips, of the chest and of the rectum, and a cutaneous carcinoma at the level of the right false-ribs cured by *Condurango*, 1c. Compton Burnett reports also a case located in the commissura of the lips, complicating a mammary tumor four years old, cured by the same remedy. *Thuja*, with which Marshall de Radetzki was cured of a sarcoma of the eye, produced at the hands of Jäger, in a case of carcinoma of the stomach and liver, a sudden relief of the pains and an increase of 19 pounds in the weight of the patient. Baratoux, of France, mentions a cure of cancer of the larynx with the same remedy—*Kalium cyanat.*, according to Mattes has cured cancerous nuclei of the rectum, and has proved effective, according to Adams and Tyrell, in cancer of the lips and of the tongue. With *Argentum nitric.* the author of this paper obtained a prolonged improvement in a case of vesical carcinoma.

Conium, which has frequently cured carcinoma of the mammary glands, may prove beneficial, as well as *Calc. fluor.*, *carbo anim.*, *Silicea* and *Lapis alba.*; but when the glands are indurated *Phytolacca* should have the preference. In cases where the diagnosis is doubtful, the employment of these remedies may often give good results.

Finally, we may mention the secret remedy of Rev. Marsh, which is probably prepared with *Melianthus major*, a plant which the natives of Cape Colony employ against cancer, and which several homeopaths have used with success, especially Schlegel, in a carcinoma of the ovary and a sarcoma of the eye.

As external palliative, *Hydrastis*, *Calendula*, *Eucalyptus*, either in aqueous solution or pomade, 5 to 10%, may attenuate the pains.

E. FORNIAS, M. D.

THE ABUSE OF PSYCHOLOGY IN THE STUDY OF THE NEUROSES.—Dr. Jousset comments unfavorably on a paper presented by Dr. Roy to the congress of alienists and neurologists of France, published in *La Semaine Medicale*, under the heading *Pathology and Nosology of Hypochondriasis*. In the discussion that follows, Dr. Jousset noticed the common error of considering *mental alienation* a disease, like insanity, or typhoid fever, when it is nothing but a *symptom*. He regrets the deplorable tendency of specialists of devoting themselves almost exclusively to such pretended psychological studies and of neglecting too much the pathological side of the question. It was in vain that he looked for in this paper the nosological characters of hypochondriasis, the description of its symptoms, its course, duration and termination, and its different forms and varieties. The study of the causes was also lacking, and the author candidly avows that these are not necessary elements to discuss hypochondriasis, as a disease, and that he limits himself to speak of the *hypochondriac idea*, that is, the principal symptom of hypochondriasis. Notwithstanding this promise, the seraeiologist, has a hard time to find, in the study of Dr. Roy, the minute description of the symptom hypochondriasis, its numerous varieties, the enumeration of the diseases in which it is observed, its diagnostic and prognostic value, and finally the therapeutic indications it may furnish.

Of course, all this is out of date, it is practical medicine and consequently a thing which seems strange to the specialists who took part in the

discussion. These intellectual gentlemen were only riveted on one thing, to know if *hypochondriasis is of psychic or peripheral origin*, or perhaps if it is not both, psychic and peripheral. This expression *peripheral* is so visionary, that we must explain in common medical terms, what is to be found under this classification. There are two theories. In the *psychical theory*, it is claimed the whole disease is under the dependence of a delirant conception of the brain; that it is of cerebral origin. The second theory teaches that hypochondriasis is *peripheral*, and pretends that the disease is dependent on visceral sufferings transmitted to the sensorium through the sympathetic nerve.

The general practitioner, and myself among them, says Jousset, will consider this a pretty nonsense, but the whole report is of that style and the discussion which followed it, is no better. Let us cite some examples: "Normally, the visceral life is outside the conscience. Sometimes it can cause certain degrees of alteration of our *affective tone*, but we remain ignorant of the origin of the alteration and of the *physic activities* which created it. On the other hand, as soon as reflex visceral pain appears, the change is complete; the sensations produced by the abnormal activity of the viscera occur in the conscience, usurping the central field of attention. In fact, the traumatism of a limb, a burn, arrest also the attention, without bringing anything with them; if consciousness is troubled it is only on account of the pain. On the contrary, the reflex visceral pain carries with it these images and dispositions which normally remain at the border or entirely outside of the conscience and which rise henceforth to the surface." Therefore, the visceral life can cause some alteration of our *affective tone*. But when the reflex visceral pain appears, O! then, the central field of the alteration is usurped! . . . And then crop out all these images and dispositions (what kind of disposition?) which normally remain at the *border of the conscience, ascending to the surface!* I quote *verbatim*, that I may not be accused of exaggerating; but here is something better:

"In one word, for the hypochondriac idea to develop, it is necessary, 1st, a *hypochondriac temperament*, that is an aptitude more frequently inherited than acquired, a special constitutional tendency to excite the patient to rave, or at least to fall into a hypochondriacal state; 2nd, *cænæsthetic troubles*, that is, in the majority of cases, troubles of the general sensibility, with or without lesions of the sympathetic, but always under the domain of this nerve, the cænæsthesia being, properly speaking, but the vegetative or splanchnic conscience, the conscience of the sympathetic."

Hypochondriac temperament is a term out of date, which sounds badly in the midst of this language *fin de siècle*; and what to be said of the *vegetative conscience*, a cell which knows itself, which knows that it suffers and how it suffers?

This new scientific manner of speaking, which tends more and more every day to become usual among the alienists, I am sorry to say, is neither French, nor philosophical, . . . It is incomprehensible to the greater part of the profession, and by its oddness, multifarious neologisms, and consented obscurity, it only conceals the ignorance of the morbid processes.

PHLEBITIS.—Dr. Pierre Jousset, with his customary keen perception, is constantly giving us, in the columns of *L'Art Medical*, interesting subjects for study and reflection.

From three long articles on *the treatment of phlebitis of the extremities*, by Prof. Vaquez, he only takes for discussion, his teachings relative to the time, when with security we can allow motion. He considers this a problem of considerable practical importance. To stop immobilization too soon, exposes the patient to sudden death by embolism; to prolong rest of the part, beyond certain limits has also its perils, and so the physician is often embarrassed what to do. Rules have been formulated and some have had even the pretension to fix the time the rest should last. We may commence to impress a limb by passive motion, even in phlebitis of the large venous trunks, after the twentieth (20th) day. The technique of Prof. Vaquez follows: During the first week, after the 20th day, purely passive motions, consisting of *partial* movements of the articulations of the toes and feet. To this is added the *stroking of the skin*. During the second week, from the 27th to the 35th days, massage of the muscles, motion of the articulations (which?), without stroking (?) After the 35th day loosening of the bandage and mild massage. On the 40th day, the patient is allowed to take a few steps, supporting the lower extremities by bandaging.

Let us expressly remark, says Dr. Jousset, that the 20th day indicated as the time to make the first motion of the diseased limb, is not the 20th day of illness, but the 20th day after the last febrile paroxysm. This statement is extremely important and may defer considerably the time for the motion. Here are the very words of Dr. Vaquez, fixing the date of the first motion: "Complete absence of thermic rise after twenty days; absolute indolence of the veins on palpation, progressive decrease of the oedema." It seems, then, necessary in the treatment of phlebitis to take regularly the temperature, even when there appears to be no fever, so as to be apprised of any elevation that may occur and retard the beginning of motion." Such are the precepts laid down by Prof. Vaquez. We regret to say, that these precepts lack the necessary precision. What does he mean by a partial mobilization of the toes and feet, and, above all, how to render the joints movable without bending them?

The salient points in Dr. Jousset's criticism are: That he rejects all kind of massage in the treatment of phlebitis; that what he finds practical in the advice of Dr. Vaquez is, not to attempt mobilization until twenty days after the last thermal rise, when the vein will be entirely indolent and the oedema has commenced to diminish; that while agreeing with Dr. Vaquez as to the impropriety of an exaggerated duration of immobilization, several months during the inflammatory stage, he would not hesitate, in doubtful cases, to prolong the immobilization for a few weeks, bearing in mind that the breaking down of the thrombus and the carrying of the emboli are sometimes late phenomena; that he has little to say on the pathology and therapeutics of phlebitis as understood by Dr. Vaquez; and wishes to know why a *phlebitis* complicating varices, should be called *subacute venous septicemia*, and a gouty phlebitis, *recurrent phlebitis*; and why he should call *infectious*, the phlebitis that occur unexpectedly in

the varicose veins? That we should stand for the *morbific forms*, and teach that phlebitis constituted by symptoms and lesions, always depending upon a determined malady, are *affections*. Symptomatic affections of puerperal or operative pyemia, chlorosis, cancerous or tubercular cachexia, and gout, that all forms of phlebitis, vary as to sect, course, termination, in relation with the diseases of which they are a symptom; that we should remember that the varicose state of the veins does not lead to phlebitis, unless, besides the venous lesion, there is in existence a disease capable of causing it; that the *treatment of the sequelæ* (œdema, neuralgic pains, &c.,) is well known; and that the employment of *Pulsatilla* and *Mercurius dulcis* (1st trituration) has rendered him real service. He prescribes these remedies as follows: *Puls.* xx drops in 200 gramme of water, two spoonfuls at 6 and 10 P. M. *Merc. dulc.* 1c., 0.50 in 200 gramme of water, two spoonfuls at 7 and 11 A. M.

E. FORNIAS, M. D.

DENTITION.—Dr. Julis Planas, of Barcelona, (Spain) states that although dentition is a step towards a development entirely physiological, it certainly presents in a great number of cases abnormalities which seriously put in jeopardy the life of the child. It is the cause of activity of certain morbid predispositions, that seem to exist in a latent state, to develop at the time of the first eruption of the teeth, and which demand a greater energy of the vascular and nervous systems, becoming then exciting causes. Let us add to this, an irregular alimentation, excessive or of poor quality, and we will easily understand the series of changes which necessarily must follow in such frail constitution, and at an age when the powers of resistance are so small.

Difficult dentition is attended by general and local phenomena, being the most frequent the following: General malaise, with certain amount of fever, at intervals; burning tumefaction of the gums, profuse salivation, diarrhœa, cough, disturbed sleep, skin eruption, and even spasmodic and convulsive manifestations. If the first dentition progresses normally, at the end of the second year of life, more or less, is terminated, but if there are rickety, syphilitis, or tuberculous manifestations, it is delayed and sometimes anticipated. We see children 20 or 24 months old having only a few teeth (rachitics), and others in whom the teeth develop rapidly, coming out before complete ossification (tuberculous, syphilitics).

Dr. Planas' treatment is the following: When the digestive phenomena (diarrhœa, abdominal pains, flatulency, &c.,) predominate, chamomilla 3c., and Mercurius sol. 6c.; when the diarrhœa is greenish and contains blood, if there is emaciation, Arsenicum, 12c., and Aconitum, 6c., when the gums are inflamed and there is more or less fever, especially in children of a sanguineous temperament.

If the children are scrofulous, Calcarea Carbonica, 30c. and Sulphur, 30c., and if there is excessive debility, Acidum phosphoricum, 12c., but when they are irritable and exhibit much agitation Kreosotum, 12c. is the remedy. Causticum, 30c., is indicated if there is a tendency to colds and irritability of temper. Belladonna, 6c., and Ipecacuanha, 6c., if there is cough, and the latter to combat the vomiting and diarrhœa. Coffea, 6c., and Gelsemium, 6c., against the nervousness and insomnia. For nervous, convul-

sive and anxious, manifestations, &c., Chamomilla, 3c., and Belladonna, 3c., and against constipation, Nux Vomica, 6c.

In the accessory treatment he includes regularities in the hours of feeding and sleep, baths, open air, warm feet, cold head, &c.—*Boletín del Hospital Homœopathia del Nino Dios*. Barcelona. E. FORNIAS, M. D.

FRIGOTHERAPIA (PRECARDIA) IN TYPHOID FEVER.—In the *Allgemeine Homœopathische Zeitung* of November last, Dr. Sieffert, of Paris, gives us an extraordinary paper on the efficacy of cold applications to the precordial region, in the treatment of typhoid fever, and introduces the antithermic measure of Dr. Leduc, of Nantes, as a substitute for the distressing and uncertain cold immersion baths, which he considers not at all devoid of peril. Firstly he speaks of the liability to colds, principally of the respiratory tract, and of the waning enthusiasm over this problematic method, immersion baths, and then, he alludes to authoritative opinions in support of his views. Among other things he says that although cold baths may bring back to life dying anatomical elements and evidently produce an unexpected improvement, their influence, nevertheless, is shortlived, and, to be salutary, require daily repetitions. By them the patients become extremely exhausted, not only through the rough treatment and the sudden changes of temperature experienced, on going into and coming out of the bath, but by the violent influence they exert on the blood pressure. He points out the difficulty of the method in private practice, and wants us to lend an ear to Professor Bakody, who says, that while we maintain that the phagocytes play an important part in the development of inflammation, and know besides that ameboid cells are very sensitive to heat, we should, above all, consider the biological reaction existing between phagocytic activity and certain degrees of temperature. Moreover, the experiments of Max Schulze teach us that the white-blood corpuscles, under a temperature of from 45° to 46° C. become much more active, and so, it is to be inferred that the fever heat is followed by a greater phagocytic activity. All this, of course, leading again to suppose that the pyretic temperature of infectious diseases facilitates the struggle of the phagocytes against the invading microbe, the object lesson, as to the fever heat, is based also on the fact that the elevations of the temperature, through their influence over the increasing activity of the phagocytes have a salutary effect, as the phagocytes can better fulfill their task under a higher temperature than by an artificial lowering of the same, which has such a debilitating effect upon the organism. This judgment, if not absolute, theoretically, at least speaks against the artificial lowering of the temperature in those cases, and if we consider besides the practical difficulties of the cold immersion baths, we are entitled to reject them as useless.

Those who follow the idea of Prof. Bakody see in the pathological rises of temperature a defensive reaction of the organism which should be encouraged, and which in some cases, no doubt, is beneficial. But, otherwise, hyperthermia is mostly hurtful and essentially dangerous. No physician would maintain that the fever of phthisis acts beneficially, and it is generally accepted that the rises of temperature are unfavorable signs, just as the lowering is considered helpful.

Pathological anatomy goes still further, as we have hitherto been able to

find out, namely, there is a full line of unimportant lesions which, up to the present time, have entirely escaped our attention, and these are the changes that take place in the protoplasms of the anatomical elements. These plasms, we know, are fluid and of a low type. So far, they have been only inquired into after they have coagulated, and we know hardly anything about the changes they undergo during their transition from the fluid, living state, to that of coagulation; that is the state of dissolution. And yet between both these states is the road that leads from life to death. To transcend the limits, only a few degrees of higher temperature are needed. To this event Prof. S. Leduc, of Nantes, calls our attention. He claims that the greater number of deaths from typhoid are the result of paralysis of the heart. As a rule, we ascribe this cardiac paralysis to changes in the nervous centres, but, more probably, death is due to myocardial alterations, to a hardening of the muscular fibres of the heart, results never seen in localized disease of the nervous centres. This cardiac paralysis is always the result of a regular and lasting hyperthermia and sometimes we observe it without analogous changes in the functions of the nervous centres. In the majority of cases the prognosis of typhoid rests principally on the pulse and action of the heart. It is of bad omen if the pulse becomes small and weak and beats more than 120. From that we are led again to infer that the danger is the consequence of the regular and persistent influence of the temperature on the heart, and consequently we may conclude that the influence of higher temperatures on the heart should be corrected. The objections or drawbacks of cold baths, led Prof. Leduc to experiment with ice-water bags applied to the precordial region to combat hyperthermia. His exact method of procedure is as follows: In all cases of typhoid fever, when within 24 hours the temperature does not go lower than 39° C., and particularly as soon as the pulse rate reaches 120 beats, and this becomes small and feeble, an ice-water bag is placed over the region of the heart, interposing between the skin and the bag several pieces of flannel, according to the sensitiveness of the patient, and so as to measure or graduate the amount of touch influence required. The bags should be wide and closely tight to prevent any leakage and allowed to remain undisturbed in its place. It is better to have on hand two bags, one to replace the other, as soon as the ice is melted. To avoid a mishap that may disturb the patient, the bag better be kept secured by means of a bandage. If the temperature rises above 39°, 5C. and the pulse beats between 120 and 130, we will witness within two hours the effect of this procedure by a marked fall, both of temperature and pulse, the first to 38° C., the second to about 100 beats, becoming good and strong. Then all functional activity improves, especially that of the nervous centres, and soon we assist at the gradual reappearance of the normal state of the intellect. The application of this measure, besides being effective, is simple, and devoid of the fatigue, distress, peril and discomfort, which the patients so much fear and resist. The bag should be applied steadily and then the high fluctuations will drop down to 37° 8 and 38° 8, and remain so. As for the rest, the effect can be determined through the thickness of flannels, so as to be placed in position to control any excessive or abrupt action. Frequently, after an application of the bag, for six or eight hours, and after obtaining the desired effect, the measure is suddenly discontinued, with the result

that the temperature ascends again to 40° C., to fall down once more to 38° C., when the treatment is resumed; hence the necessity of never removing the bag abruptly, but gradually. As long as the temperature remains under 39° C. the pulse never beats more than 110, or ceases to be strong and regular. This method owes its wonderful effects to the ice, which when applied to any part of the body, causes at once a lowering of the temperature, noticeable at the axilla; and so, likewise, when a bag of ice-water is placed on the abdomen, to combat tympanitis, a fall of a few tenths of a degree will always result. And, as the danger of hyperthermia is due to its action on the cardiac muscle, it is in that region where we should make the application.

These are, more or less, the extraordinary assertions of Dr. Sieffert, which, appearing so convincing, may deserve a trial. E. FORNIAS, M. D.

REVIVAL OF CLARET.

A few years ago the medical profession, which, after all, is guided by a few leading lights, the rank and file having but little time and opportunity for personal investigations, was of opinion that the German white wines were better for gouty and rheumatic people than were the clarets, because (as they thought) they contained less acid. But since then it has become apparent from hundreds of analyses and scientific investigations that the facts are just the other way round, and that the Bordeaux wines contain less acid than the German wines—while only a few months ago "The Lancet" pointed out the benefits that would accrue from the more general consumption of sound wines of this kind. The family doctor who would nowadays suggest hocks of Moselles in place of a good claret of even the humbler growths would be hard to find.

But while beer, whiskey, champagne, gin, brandy, German white wines, Australian red wines, and all the other more or less delectable drinks, have kept themselves in affectionate memory of the thirsty public by up-to-date business methods, advertisements of any of the famous Bordeaux productions are as rare as snow in July. Claret, in a lordly, conservative way, has been the Lady Vere de Vere among the beverages; and great as its own merits and charms may be, it has, not unnaturally, suffered from neglect by reason of its uncommercial reticence. "Out of sight, out of mind" applies to the love for wines as well as the love for ladies.

Given the slightest impetus in the shape of ordinary business methods, clarets at the present day would come into their own again. For ten years or so, from about 1880 to 1890, phylloxera, oidium, and other diseases ravaged the French vineyards. But by grafting of hardy American vines on to the French plants these diseases were effectually rooted out, and now the French plants are not only free from blemish, but have gradually recovered entirely their old character, yielding excellent vintages and very large amounts.

Nowhere else in the world can there be produced such red wine as in the favored regions of Bordeaux. California and Australia are training on certainly, and are turning out fair wines now; but the concatenation of circumstances which exist in Bordeaux—the soil, the climate, the enormous periods of cultivation which the vines have undergone—establish the French clarets in a class by themselves, unrivalled.—*London Mail*.

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THE PSYCHOSES FOLLOWING GYNECOLOGICAL OPERATIONS.

BY HOMER I. OSTROM, M. D., NEW YORK.

ANY surgical operation is liable to be followed by disturbance of mental equilibrium, lasting a variable length of time, but operations on females, and especially gynecological operations are more prone than others to give rise to such sequelæ. Many factors contribute to this post operative history. Foremost among these is the peculiarly impressionable nervous organization of women. This enables them to endure suffering, to meet demands upon their nervous strength as men cannot, but the reaction from this is frequently disastrous, and shows itself in nervous exhaustion, in neuroses that frequently from their persistence, and intractable character cause us to wonder whether the operation was worth while, the psychoses being more disabling than the local disease. I have frequently been led to ask myself this question in the face of compelling clinical data, and because post operative psychoses bear no constant relation to the gravity of the operation, a simple perinæorrhaphy being liable to be followed by mental disturbance, as well as the severer and more grave abdominal operations. I have even known profound depression, almost reaching melancholia, to follow a simple gynecological examination, when later I curetted this patient under anæsthesia, with no untoward results.

The element of uncertainty, of which this instance is an illustration, is I think, not sufficiently considered in

gynecology. We are too apt when pronouncing in favor of an operation, to neglect to consider the possible mental effect that may follow, or to place this factor in the equation. But even when urging the necessity of giving post-operative psychosis the importance it deserves in gynecological surgery, the very vagueness with which any rules for guidance can be formulated, deprive the urging of much of its weight.

Certain temperaments are peculiarly susceptible to mental derangements, but this will show itself under any stress, or mental strain. To such, the shock of an operation, and it may be the anæsthetic, are sufficient to disturb nervous equilibrium, and result in an inability to establish normal relations between the individual and her environment. Such a temperament is difficult to define, and it is probable that it contains many phases that we do not at present recognize, but I have come to regard as probable subjects of post-operative psychoses, neurasthenics, and this covers a vast multitude of cases, especially if the operation is an oophorectomy, or a nephrorraphy. Such patients frequently develop mental disturbances in addition to the already existing neurasthenia.

I do not know but that some form of sepsis with which we are not familiar, may be responsible, the temperament being favorable, for some of the cases of post-operative psychoses. We are possibly too restricted in our definition of septic infection, for we consider certain variations of pulse and temperature as essential to a diagnosis. It is conceivable that germs, or ptomains may enter the circulation and pass through their existence, and ferment, without affecting either the temperature, or the heart. In point of fact, acute mania, and we occasionally meet with this after gynecological operations, is sometimes attended with febrile phenomena, without any other conditions local or systemic that indicate septic infection. May not such be a manifestation of septic intoxication? Certainly this phase of post-operative psychoses is well worth investigation.

The practitioner who opposes his broad shoulders of "experience" against recent investigations and data that were not included in his early education,—and there are many such,—declares that science has become "bacteria mad," and resents the findings of the laboratory, and their application to clinical medicine, but the mysteries of nature are discovered through

our knowledge of her minute parts, and many hitherto obscure phenomena have received their explanation in the action of forces generated by the completion of a life cycle of microscopic forms of animal and vegetable life, whose host is the human organism.

One fact we must consider as established, that there is only a casual relation between operations, and post-operative psychoses. That is to say, the operation *per se*, without anti-operation conditions, as the constitution, does not stand in the relation of cause to the nervous phenomena that follow. The post-operative neurasthenic, was a neurasthenic prior to the operation, and needed only this incitement for development. Such an exciting cause may be either the surgical shock to the nervous system, whereby nourishment of the nerves is seriously impaired, or a poison generated by bacterial life—*sapremia*.

I do not think we are justified in laying much stress upon the anæsthetic as a causative factor of post-operative psychoses. In the absence of positive date to the contrary, I would rather be inclined to regard the anæsthetic as mitigating the severity of post-operative psychoses, inasmuch as it prevents the degree of nervous shock that without deadening sensibility, must be inflicted.

The operations in gynecology that include the removal of the sex glands, the ovaries, are especially liable to be followed by a disturbance of nervous equilibrium, for there appears to be little doubt that the ovaries, in addition to the function of ovulation, manufacture a peculiar secretion, *liquor folliculi*, that maintains sexual characteristics, both physical and psychological. Nature accommodates herself to the gradual folding up of this function that takes place during the menopause, even then the characteristics of sex are frequently lost, but no provision is made in the economy for the sudden withdrawal of the secretion of the ovaries. When this occurs, as in double oophorectomy, the conditions are favorable for the development of a latent tendency to mental unbalancing, and if such does not exist, the essential characteristics of sex, which require for their complete nourishment and maintenance the continued supply of this fluid, become abnormally active. I feel that this is a point in gynecological surgery that has hitherto not received the attention its importance deserves. We have

been inclined to look upon the removal of the ovaries as affecting the reproductive function only, and the mental states that follow the ablation, as due wholly to the knowledge on the part of the patient, that her femininity had been invaded, and that she had lost the qualities that society looks upon as essential to every woman. Undoubtedly this factor contributes to post-operative psychoses, but it cannot be the sole cause of the nervous cyclones that frequently follow complete castration; or the neurasthenia that causes us to question whether the ovarian malady would not have been preferable to the chronic invalidism that must sometimes be recorded in these cases. I am confident that many times the patient, if consulted, would, knowing the issue, without hesitation reject the operation, preferring to suffer during the remainder of her life.

From my clinical notes I have been led to believe that there are two classes of post-operative psychoses, distinguished according to the time that elapses between the operation, and the appearance of the symptoms. I think this must be more than a casual relation, and probably has to do with the generation of toxins, and the consequent intoxication of the system, or the manifestations that follow the withdrawal of pabulum from the nervous centers that are connected with the reproductive organs.

Post-operative psychoses develop more frequently during convalescence than immediately after the operation. The loss of mental equilibrium may be associated with a slight pyrexia, that at first suggests septicæmia, but an analysis of the clinical history will eliminate this condition, as it is generally conceived to exist. I believe, however, such cases to be toxic, the peculiar poison expending itself on the psychic centre, and not upon the heart and metabolic organs. It is evident that the pyrexia is quite secondary to the mental state, not only in the time of occurrence, but in actual dependence.

In other cases there may be no variation of pulse and temperature, the intoxication shows itself in a sudden delirium, or in some fixed idea, as an unreasonable antipathy to the nurse, refusal to eat, confused identity, or inability to recognize familiar surroundings.

I recall one case that on the second day following a single oophorectomy, suddenly refused to believe that an operation

had been performed, insisting that she was pregnant, and would soon be in labor. Another case for several days could not place herself; she regarded me as a stranger, and did not recognize her nurse, who had been with her some time prior to the operation, and insisted that she was detained in the hospital needlessly, and against her will. The operation was a vaginal hysterectomy, and because of the patient's inability to believe that she had undergone an operation—the state before the operation had become a blank to her—the necessary dressing of the wound was attended with considerable difficulty.

The post operative psychoses that form a part of the early history of convalescence are almost certain to recover. The intoxication is a mild one, and nature's inhibitory forces are sufficient to overcome the poison. If an artificial menopause has been induced, the psychic equilibrium is liable to be disturbed at each period when menstruation should recur, until the system has become accustomed to the change, but an ultimate complete recovery can confidently be looked for.

The post-operative psychoses that develop later are of more serious import. They indicate a deeply acting toxine—the condition for its generation being associated with chronic processes, and they also indicate, the case being complete ovarian ablation, that the system cannot easily accommodate itself to the loss of the *liquor folliculi*, and that psychic equilibrium is profoundly disturbed. The cases of delayed psychoses, have been associated with complete panhysterectomy, or double oophorectomy, and are I believe almost always grafted upon an acquired, or congenital neurosis. Such cases may leave a lasting impression upon the mentality, and it is from such that post-operative insanity develops. These chronic cases cannot be alone explained upon the hypothesis of a continued manufacture of the essential toxine, rather the toxine, and a deficiency of the *liquor folliculi* together, have induced such trophic changes as to create a permanent neurosis.

An illustrative case occurs to me. The operation was a double oophorectomy for grossly cystic ovaries the seat of inter-menstrual suffering caused by the rupture of Graafian follicles. No unusual difficulties were encountered, and her surgical convalescence was without incident, but at the first time for the recurrence of menstruation she became very melancholic, with a suicidal tendency. She refused food, saying that

she did not want to live. She conceived such an aversion to her nurse—that is a very frequent symptom—that I was obliged to procure another. She recovered from the melancholia, but suffered a relapse at the next period for menstruation. These attacks have become less marked, but now, almost five years, though physically perfectly well and strong, her psychosis manifests itself chiefly in the form of having “sinned in submitting to the operation,” and of aversion to me for having performed it; for having been “a party to her wrong doing.” At times she will repeat this to herself for hours, in tones of the most profound depression. Aversion to the surgeon who performed the operation is a frequent form of gynecological post-operative psychosis, but the mental attitude in this case has lasted an unusual length of time. Such patients are also not infrequently possessed with the belief that they have committed an unpardonable sin in submitting to the mutilation, showing the intimate relation between the sex glands, and the mental state. Such cases are possibly the development of a profound maternal instinct, that has been rudely shocked.

A second case, similar as far as the operation is concerned to the one just narrated, presents this phase in even a more marked degree. The patient, an unmarried Catholic, highly educated, and most exemplary in her life, shortly after the operation, began to suffer religious scruples as to its justification. This notion became so fixed that it assumed the form of a mania, the patient insisting that she had “sinned against the Virgin Mary”; and later that she must pass the remainder of her life in doing penance. She looked upon me as the cause of her sinning, and upon her family physician who brought her to me, as having tempted her to evil. This case exhibited symptoms that further showed the sexual system had been profoundly attacked. She said that as she had consented to being unsexed, her only hope of expiating her sin was to seek every opportunity to bear children, and that should she become pregnant, the Virgin Mary would work a miracle in her case. Her conduct became so lewd, and she so unmanageable, that it was necessary to restrain her. She died six years after the operation, of pneumonia, no mitigation of her psychoses having taken place.

My note book furnishes other illustrations of post-opera-

tive psychoses, ranging from slight and temporary aberrations, to such profound disturbances of mental equilibrium as I have cited. They occur with sufficient frequency in gynecological surgery to be regarded as possible factors that should be reckoned with in making a prognosis, especially of cases in which one, or both ovaries are to be removed.

We may pertinently inquire if there are any methods by which post-operative psychoses can be prevented, or failing in this, how shall we treat such cases when they occur?

There is not much encouragement to be derived from any preventive measures that we may be able to adopt. The nervous system, upon the equilibrium of which mainly depends psychic disturbances, is only imperfectly understood. We are able to recognize the gross stomata of hysteria, and there are certain well known signs that mark a neurasthenic, but we must appreciate, from the unexpected, and unlooked for manifestations of nervous derangements frequently met with, that there exist many finer vulnerable points; nervous forces that only require to be liberated to develop gynæcic post-operative psychoses. These cannot always be recognized, being latent, either as congenital defects, or acquired errors in metabolism, and are first manifest to the clinician as sequelæ of the unusual strain that the nervous system has been subjected to by the operation.

We may quite confidently anticipate post-operative psychoses in patients who have previously shown nervous unbalancing; an undue susceptibility to pain; an unreasonable exaggeration of minor conditions, and symptoms; but on the other hand, the most intractable cases I have known, developing into acute mania, have occurred in persons who I considered unusually well balanced mentally, women who gave no indication of being easily disturbed. I doubt not, however, that something abnormal in the nervous system existed, that failed of my recognition.

Concerning the question of preventing post-operative psychoses in gynecology, two points are worthy of consideration. *First*, because of the certain nervous disturbance that results from depriving the system of the secretion of the ovaries, the complete removal of ovarian tissue should be avoided by every possible method of treatment, and every legitimate resource of medicine and surgery exhausted before resorting to total ablation, when there seems to be a possibility of success.

Second, That in many cases when mental disturbances follow the removal of the ovaries, the operation has only anticipated the psychic state that would have attended the natural menopause. Probably in a more tempestuous form because abruptly brought about, but none the less certain to attend the naturally induced folding up process.

When time permits, and there is reason to anticipate post-operative disturbance of mental equilibrium, possibly something may be accomplished by hygiene, and careful treatment. Dynamic medication, reaching as it does the source of diseases, should give valuable assistance. Any treatment however to be effective, must act through metabolism, and improve general as well as particular nourishment, for neurasthenia, as well as the profounder maladies due to a disturbance of metabolism especially involves the nutrition of nerve cells, and through these, effects organs, and their functions.

In this connection my experience has impressed me with the value of Kali phosphoricum, Magnesium phosphoricum, and Ferrum phosphoricum, from which I have obtained satisfactory results in preparing neurasthenic patients for operation. The method of administering these tissue remedies, I believe to be important. When time permits, I use three potencies; the third, the sixth, and the twelfth, exhibiting each potency one week, and continuing the rotation if possible. I have no theory to offer in defense of this method of treatment; it is merely a matter of clinical experience.

Since the inhibition of the glandular function of the ovaries, and shock, contribute to the disturbance of nervous equilibrium, our operative technique will bear upon our results. To this end ovarian tissue should not be needlessly sacrificed, for it will be remembered that even a small portion of the ovary is capable, under favorable conditions, of functioning, and therefore if any part of the gland can be preserved, it should be placed where it can establish vascular relations sufficient to insure its life. The operation of transplanting small portions of ovarian tissue for the purpose of preserving the secretion of the *liquor folliculi* that I have previously advocated ("The Artificially Induced Menopause," THE HAHNEMANNIAN MONTHLY, July, 1905, p. 507), has, I am confident, done much towards averting and modifying post-operative psychoses. I prefer, as already explained, to place the ovarian fragment in

the cellular tissue of the broad ligament where the areolar structures are abundant, but almost any part of the peritoneum is available for the purpose. Every precaution will, of course, be used to retain only healthy tissue that will not, in its foreign relations continue the disease which made the operation necessary.

Unfortunately we are not possessed of any very positive data concerning the relations between the surgical procedure, and the individual, that determine the degree of shock. That such interdependence exists, and will become a recognizable quality, cannot be doubted, but at present it does not form a part of exact medical knowledge. There is, however, no question but that excessive handling of the abdominal viscera, and hence traumatism of the abdominal splanchnics, induces more or less exhaustion of the nerve centers that must interfere with function. Therefore in one predisposed to disturbance of nerve equilibrium, a prolonged operation, or lengthy manipulation may be contributing causes to post-operative psychoses. The minimum of manipulation, with the minimum consumption of time, will, especially in abdominal operations give the best results.

I have already referred to the part of sepsis in causing post-operative psychoses; the strictest attention to aseptic technique will eliminate this source of danger.

The treatment of developed post-operative psychoses may require the co-operation of the alienist, but early recognition of the coming storm may avert an impending tempest. Any departure during convalescence, from the normal characteristics of the patient, if a naturally placid person becomes irritable, or an unsuspecting person becomes suspicious of the motives of those around her, should be looked into, for some cause must be operative to so profoundly attack the springs of life.

I always feel some degree of uneasiness when a patient cannot rest, when to procure sleep, after the first forty-eight hours the immediate effect of the operation, and of the anæsthetic have passed off, it is necessary to resort to the use of anodynes. If the nervous system has reacted well, the patient should be able to rest, and to feel refreshed after sleep. While this state may not bode ill, it should not be allowed to pass unheeded.

The digestive organs will also be an index to the condition of the nervous system, and furnish valuable information of the state of nervous metabolism. An entire atony of digestion, with no desire for food, shows marked depression of the nervous centers, which, of course, cannot continue without disaster. I am not now speaking of the first few days following an operation. These will be utilized by nature in restoring equilibrium, but if after this period has passed, the equilibrium has not been restored, either the physical, or nervous system must suffer.

We sometimes meet with another class of post-operative cases, when the manifestations of nervous disturbances are early and violent. I have used *ovarine* in three such cases, both ovaries having been removed, with, it seemed to me, good results. Two cases improved, the third received no benefit from the treatment.

The question of sepsis will be carefully considered in the acute cases, and a treatment in accordance with the findings instituted.

Mental symptoms will frequently call for our great remedies: Hyoscyamus, Belladonna, Stramonium, Cimicifuga, Aurum metallicum—a grand remedy—Conium, etc.

The patient should be removed as quickly as possible from the environment of the operation with the object of severing all psychic association. A change of nurses, even a change of physicians may in some cases be advisable. Breaking the chain of circumstances that lead up to the operation, will have a beneficial effect upon the mind.

H. COULSON FAIRCHILD writes to *The American Physician*:

"I knew a little daughter, whose eyes had apparently been ruined by acid, used by a trained medical nurse. When the Christian Scientist was called the two eyes were a mass of corruption. In a few days this was all gone; one eye meanwhile had burst and run out; the other had the appearance of a piece of white meat—this one having apparently been cooked on the surface by the acid, while the other had been eaten and destroyed. Under the continuation of Christian Science treatment, both eyes were completely restored, so that the child now sees well out of both eyes."

Here is care-taking, etiology, pathology, and diagnosis with a vengeance, not to mention other things. But neither Christianity nor science seems to be in it. It was George Washington who could not tell a lie. He, however, was a boy of sense.

ALBUMINURIA OF PREGNANCY.

BY W. B. HINDALE, M. D., ANN ARBOR, MICH.

ALL animals, man included, in the wild state suffer little from or during pregnancy and parturition. As they become domesticated, their sufferings increase. Civilization brings with it susceptibilities of certain kinds comparatively unknown to the low planes of culture. The more the mental and nervous organisms are trained and subjected to refinement, the more susceptible they become to derangement. What is so strikingly true of the mental and nervous systems is also quite true of some other organs such as those of reproduction, excretion, elimination, etc. Dr. R. J. Kinkead, of Galway Hospital, makes the statement that the peasant women of Ireland are very much less afflicted with eclampsia than the town dwellers with more cultivation of the emotional and nervous centres at the expense of the physical development. If this be true of the peasant women of Ireland, we are justified in making the application wider and in accepting it as a generalization verifying the clinical rule just given.

Among the organs that have thrown upon them some of the burdens of civilization are the kidneys. It would be a pleasure to stop and elaborate this statement, but time does not permit in this connection. Saxe makes the statement that next to the pulse and temperature, the urine offers the greatest possibility for insight into the workings of the human system. In problems involving the bodily functions or as a guide to the processes of construction and destruction of the living cells and the elimination of the effete products of such processes, which go on with unusual activity during pregnancy and are to be considered in relation to two lives, the composition of the urine is not of third but of first importance.

Clinicians have watched for a long time the urinary secretions of pregnant women for abnormal ingredients and learned to attach serious significance to their presence, especially the presence of albumen. It has been known that albuminuria complicating pregnancy is very apt to be associated with a series of unfortunate events each worse than the preceding, culminating, usually, in a nervous explosion, perhaps spontaneous abortion, and, often times, a never-ending sleep from what has heretofore been designated as uremic poisoning.

We have heard of the Bright's disease of pregnancy and other renal complications due to mechanical pressure. The explanation for these states depends upon the supposition that the enlarged uterus presses upon the renal veins, thereby raising the venous blood pressure which, in turn, congests the kidney and forces it into abnormal activity. Modern theories have caused pathologists to abandon very many of their former teachings and among those abandoned is the mechanical explanation of the kidney of pregnancy. Anatomists tell us now that the pressure from the gravid uterus can not affect the renal vessels, that the topography of the parts does not normally admit of such encroachment. Anatomical reasons then, if not others, compel the abandonment of the old explanation.

The theory of toxic poisoning and auto-intoxication is well established and being put to wider application every day. Not only health but life itself depends upon a constant adjustment of the eliminative powers of the body to the products of metabolism. If the products of the vital processes be excessive, or if some unusual element be elaborated, or the organs of elimination be insufficient, impurities may accumulate and circulate in the blood and poison the more vulnerable parts.

Neither time nor the ability of the writer permits any extended elucidation of the topic under consideration. All that either possibly permits is the correction of some untenable theories and the statement of some of those that have taken their places.

Many women have a susceptibility to certain disorders. Their vital capacity may be just sufficient for ordinary every day life. They are more on the balancing point than others of stronger physical development. Although the circumstances of taking part in the creation of a new being are naturally physiological, they frequently disturb the equilibrium of sensitive organs, especially such active ones as the liver and kidney. Puerperal albuminuria and eclampsia do not depend upon Bright's disease. Vomiting of pregnancy can no longer be explained by a heightened reflex excitability. They are due to toxæmia incident to pregnancy. The woman affected by them has her physiological adjustment disturbed, shocked, if you please, by having imposed upon her a parasite, the fetus, to whose growth she must contribute and to which her own organs, if possible, must automatically regulate themselves.

Suppose we observe the following symptoms in a case of scarlet fever, diphtheria or other infectious disease: vomiting, nervous disturbance, albuminuria, enlargement of the heart and spleen, headache, convulsions, coma, etc., to what do we attribute them? Of course to poisons elaborated by the diseased organs and remaining in the system, probably, mostly circulating in the blood. Suppose we observe in a pregnant woman the same symptoms; does not analogy lead us to suspect a similar exciting cause? We know more about the toxins of infections, which is very little, but we may see the whole series of events that are enacted there reproduced, perhaps not so rapidly, in the pathology of pregnancy. We may produce nearly the identical symptoms artificially with drugs; plumbum for example, will enact a scene quite similar to the toxæmia of pregnancy. What the poisons are that are elaborated in idiopathic cases are largely matters of conjecture. It has been proven that albumen is not a toxine. The term uremic poisoning has been employed to designate the terminal phenomena of diseases associated with urinary derangements, and deemed particularly applicable in case of suppression; but toxæmia of pregnancy is not probably uremic. The most that is known about it is that it is not some things that it was supposed to be, and that it is probably a mixed poison, or a mixture of poisons, producing auto-intoxication. "Nausea and vomiting of pregnancy," which we were taught to regard simply as "signs," lassitude, hysterical tendency, mental symptoms, jaundice, etc., were formerly supposed to be mere coincidences of pregnancy and not to be considered unless becoming "pernicious." Of course, it is possible for a pregnant woman to feel faint, to vomit and even to have albumen in her urine owing to accidental causes or regular bodily habits; but if these symptoms develop in association with pregnancy they are clinical entities and tend to be progressive. They are said, post-mortem, to be usually associated with definite lesions of the liver and if careful and systematic ante-mortem observations be made of the urine, unoxidised proteid derivatives and failure of urea formation demonstrable. If this be true, the statement that the condition of the urine of a pregnant woman is a guide to her physical status is most forcibly impressed upon us. We may well inquire whose fault it is that these toxins are allowed to circulate in the system of the expectant

mother. What part of her organism is so undutiful as to permit poison-retention in her economy? Some have tried to fix the blame upon the foetus, but the opinion seems to prevail among those who have made experimental studies of the problem that the defect is maternal and not foetal. The liver with its manifold functions appears to be mostly at fault. The present view classes the disease as a functional disturbance of the liver in which it fails to properly dispose of the products of nitrogenous waste, not synthesizing them into urea but allows their free circulation in the blood eventually to do violence to the kidneys and other organs. Sooner or later the liver becomes organically affected and enters upon a stage of degeneration known as acute yellow atrophy.

Acute atrophy of the liver has been supposed to be quite rare and of uncertain origin, but recent studies of the toxæmia of pregnancy indicate that the morbid process occurs very frequently and may be followed by recovery if the exciting cause be removed in time.

While the subject of toxæmia of pregnancy is an absorbing one and involves so many interesting inquiries, I must not forget the theme of my paper, viz:—The Albuminuria of Pregnancy. Since the year 1843 the presence of albumen has been known in eclampsics. Formerly it was supposed that the albumen acted as a poison and caused the eclampsia. It is now known that it is only an incident occurring with a general condition, and then not always present; a mere symptom portending an approaching climax the elements of which are less discoverable but already working. If the liver in its protective capacity fails to neutralize the toxins which find their way into the blood from the digestive tract, or breaks down in its synthetic capacity, or does both, the excess will fall upon the kidney and probably injure its finer structure. If the epithelium of the glomeruli be stripped off, albumen will dialize through. The albumen does not do the injury to the finer structures of the kidney, it only filters out from the blood through the tissues that have been rendered non-resistant by the irritating poisons that have escaped the liver. In this way, the presence and amount of albumen is a warning and kind of guide to the mischief that is being done by the agencies that have enabled it to make its appearance. Its appearance should be a warning, but its absence does not necessarily signify that every thing is

right. Some fearful intoxications and eclamptic seizures occur without the presence of albumen in the urine. Any pregnant woman who has an unusual disturbance of any of her important functions, be they of the digestive or urinary tract, of the skin, or be they cerebro-spinal or mental, is an object of solicitude whether the epithelium of her kidneys be intact or not. She deserves to have her urine analyzed by an expert who is capable of both the examination and the interpretation of his findings. Even if the liver be insufficient, the kidneys may endure the overstrain and eliminate the poisons with sufficient rapidity. Their tension varies from moment to moment according to their load. If, on the other hand, the kidneys be slightly deranged before the exigencies of pregnancy come on, they may yield to a minimum amount of poison as the following case narrated by Brouardel and instanced by Kinkead illustrates:

"A retail poultry-woman in the market, who had a fine stuffed turkey remaining on her hands, invited her relatives and friends to come and help her eat it; all who partook of this turkey became ill; the stuffing, which was no longer very fresh, contained toxic alkaloids. The woman alone, who had not eaten more than her guests, died, because she had diseased, and therefore inadequate kidneys. She could not eliminate the toxic substances which she had swallowed."

Now suppose that this woman and her guests had all been pregnant or suffered from diphtheria or lead-poisoning instead of meat-poisoning. The same results might have followed. If she had been pregnant and any of her organs had gone wrong for a time, poisons would have escaped, if only to a small degree, into her blood and threatened her life, the same as the turkey, by being retained owing to renal insufficiency.

From the foregoing the following conclusions may be drawn:

1. The toxæmia of pregnancy is a distinct clinical entity the same as any other disease depending upon over-elaboration or defective elimination of the products of perverted metabolism.

2. According to the present theories, the primary fault falls upon the defective functioning of the liver in its not properly synthesizing the elements of proteid waste into normal urinary ingredients.

3. A woman suffering from a minimum of poison may die owing to insufficiency or irritation of the kidneys previously existing.

4. A woman suffering, even severe toxæmia, may eventually come out all right if her kidneys are adequate to the overload of poison thrown upon them.

5. Albumen is not always present in the urine of pregnant women who are suffering from toxæmia, and when present is a sign rather than an integral part of the disturbing elements.

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THE ETIOLOGY OF MENSTRUATION.

BY JNO. E. JAMES, JR.

(Read before the Phila. County Homœop. Med. Society.)

A FEW words by way of explanation may be in order for my presenting to you such a familiar subject as menstruation. My purpose is to consider a phase of this phenomenon which, as a rule, is given but little time and attention—namely, the etiology. Unfortunately, as we attempt to penetrate into the mystery surrounding this particular phase, we meet with numerous theories and hypotheses which heretofore have tended more to cloud than to lighten the field of investigation. Recently, interesting experiments have been conducted, and although the results cannot be put down as absolute or definite, yet they are scientifically, most interesting, chiefly from the viewpoint that they bring with them a more definite basis for determining how and why the woman has this regular monthly flow.

It has been the tendency of investigators in past years—probably having secured a clue from Darwin—to conduct extended examinations and experiments with the “Brunst” and with the periodic discharges of variable nature—from the genitals of the higher developed types of monkeys, and the lowest tribes of man. It was hoped, by analogy, to derive some definite cause for the bleeding in the highest developed form of the human race. The differences found in the two extreme types were supposed to be due to civilization, posture, refinement, change of environments and numerous other such causes. Reed sums up his discussion upon the etiology in the following words: “We can do no better in the present state of our knowledge than accept menstruation as a habit which has been nailed upon our race by heredity and which is for us an ultimate biologic fact.” We should not be satisfied with accepting a habit, nailed upon us, nor simply to regard such habit as a biologic fact; we ought, and must go further and at least attempt to solve the why and the wherefore.

For quite a long while the nervous system has been looked upon as the governing and determining factor in the menstrual flow; a potent factor in its establishment and in bringing about its regularity or irregularity. The basis of the theory was naturally mostly hypothetical, inasmuch as material

was difficult to obtain. That the process of menstruation was in some manner, and most probably by means of the nervous channels, united with the entire organism, to be influenced by alterations occurring in some distant part, and it, in turn, influencing the normal rhythm of other processes of the body, was borne out by the experiments of Goodman, Reinl, V. Ott, and others upon the temperature, pulse, blood pressure, inspiration and expiration force, and reactions of the patellar reflexes. These showed that shortly before, or directly after, the beginning of the menstrual flow, all the functions of the body were increased, and with the appearance of the bleeding, quickly decreased. Just how these changes could take place, was without cause stated. Pflüger's hypothesis may explain the phenomenon to a degree—at least, the dependence of the bleeding upon nerve origin. This investigator disregarded the older idea of the nervous origin in the uterus itself and based his theory upon the developments in the ovary. He believed that the constant growth of a Graafian follicle produced a *mechanical* irritation on the nerves in the ovarian stroma and that, as more recent examinations claimed to show, the maturing follicle became surrounded by a thick net work of fine nerve fibrillæ. When the irritation by the enlarging follicle reached a certain strength, there occurred a reflex act inducing hyperæmia of the genitalia, the presence of blood in the uterine mucosa, subsequently discharged, and at the same time complete ripening and bursting of the follicle itself.

This mechanical basis of Pflüger was apparently corroborated by the experiments of Strassman. The latter worked upon animals and demonstrated by the injections of salt solution, glycerine, gelatine, to increase the intra-ovarian pressure, that he obtained the typical "brunst" together with swelling and hyperæmia of the uterine mucosa.

The results of the experiments of Pflüger and Strassman are of importance from one particular viewpoint. They point to the ovary as the organ of research to determine the etiologic factor of menses. It was at one time believed that without ovaries, menstruation could continue, and quite a few cases are on record where the woman bleeds after a double oophorectomy. In the light of present day experience this idea is false; such reports are misleading. Bumm writes his opinion, based on post-mortem findings in women who have died sud-

denly during menstruation, and from experience gained in cases of complete oophorectomies—"as a rule, menstrual bleeding coincides with the bursting of a ripe Graafian follicle, and, as a matter of fact must the functional activity of the follicles be considered as the effecting force in bringing about the process in the uterus. Without functioning ovaries there can be no menstruation. Women with congenital defects of the ovaries do not menstruate and those in whom the ovaries are degenerated by disease conditions or are artificially removed, cease to menstruate."

Halban, by experiments on some of the higher forms of monkeys, demonstrated these two essential facts:

1. Ovaries completely extirpated and transplanted to some distant portion of the body—menstruation continues.
2. The transplanted ovaries subsequently removed—menstruation ceases.

Proof conclusive is here furnished for the dependence of the catamenial flow upon the presence of the ovary. We now advance a step and invite the old discussion of the relation between ovulation and menstruation. We state the following to begin with: Although ovulation may take place without menstruation, *c. g.*, lactation, nevertheless, menstruation is always preceded by or accompanied with ovulation, and the latter we consider its exciting force. Bischoff was one of the first to give support to this idea, by his discovery of the periodicity of ovulation. Küstner, in a recent work, upholds the fact by writing: "In general, the expulsion of the ovum from the follicle and the beginning of the uterine bleeding occur at the same time." Also, the experiments of Leopold, most carefully conducted on the living and dead subject, have determined that menstrual bleeding is accompanied by an ovulation and that the two processes follow each other in a definite manner, namely, ovulation at first takes place, and then, within a few days after the expulsion of the ovum, the endometrium begins to bleed.

It is sufficient to add that experimentally other investigators have determined this same relation, notably L. Fraenkel, who, as we will later mention, took even a more advanced step than his fellow experimenters.

The question arises, how to explain these two processes as contemporary, or in what way does the one induce the other.

The best explanation, even though it be the most recent, considers the ovary a ductless gland. In view of the facts as I have stated them, it seems highly probable that the ovary does possess the power of producing a certain secretion—it may be a chemical irritant, which acts directly and locally upon the uterus, giving rise to an hyperæmia, this in turn to the menstrual decidua; and from this, provided the ovum is unfertilized, occurs the bleeding. Remove this irritant, *e. g.*, through atrophy of the ovary, or operative removal of this organ, and not only will menstruation cease, but even the uterus will undergo atrophy. This from general clinical observations.

As to the mechanism of the action of this "Inner Secretion" there arose two schools: the one adhered to the nervous channels, the irritant being the underlying factor in a reflex action; the other claimed its passage to the genitalia through the blood channels, and hence possessed a direct influence. To the latter school belongs Schauta, and he bases his standpoint upon the experiments conducted by Halban on the transplantation of ovaries. The ovaries were transplanted to the mesentery and to the subcutaneous tissues. They became firmly attached in most instances, and in these cases, the menstruation continued. Likewise, such ovaries were proved to exhibit follicle ripening, and the ovi expelled, capable of fertilization. He draws his conclusion in these words: "Since such ovaries are completely without nervous union with the uterus, we conclude there must be a specific chemical discharge on the part of the ovary, after the manner of an "Inner Secretion," which possesses the power of regulating the menstrual phenomena, formerly ascribed to nervous irritation." We are justified, in the absence of facts disproving, to conclude that this ovarian secretion is transferred to the genitalia through the vascular system.

As to where this Inner Secretion has its origin is more or less hypothetical. The majority of experimenters claim it to be a product of the ripening follicle; a few, Frankel, as an example, attribute the origin to the corpus luteum; while a certain French investigator claims to have found glands in the ovarian stroma to which he ascribed the function of secreting this special substance. Were the latter the case, the dependence of menstruation upon ovulation would be a false conception, and the presence of a healthy ovary would alone be

necessary. The former we believe; the latter, we must admit does not go far enough, and does not agree with clinical facts. To quote from Schauta once more: "Since it is not the living ovary itself to which this Inner Secretion with its effect on the uterus, belongs, but *only* the functioning ovary, showing the periodical intervals of follicle ripening, we are justified in supposing that this Secretion arises not from the ovarian stroma itself, but from the follicle, and this in the stage of corpus luteum formation—a supposition strongly supported by the experiments of L. Fraenkels. In this statement we observe a marked support to our doctrine of the dependence of menstruation upon ovulation. We also have our attention called to the fact that we must consider the ovary in this relation only while it is functionally active, and hence the presence of menstrual bleeding only during the child-bearing period of the woman's life—from puberty, the beginning of ovulation, to the menopause, the cessation of ovulation.

The reverse of our rule I have already admitted, namely, ovulation without menstruation. Examples are at hand of pregnancy before puberty, after the menopause, during lactation. Just how to account for this phase has not with any certainty been determined. It is true, however, that in these instances the endometrium must be considered as in an abnormal state: in the one instance, undeveloped—not prepared for its normal function: in the other, we have senile, atrophic changes beginning; in the other, a certain anemic or possibly atrophic condition is present, due to the nursing. We have all seen cases of marked uterine atrophy following too prolonged nursing. Whether these pathologic uterine conditions, permanent or temporary, are sufficient to prevent a bleeding despite the presence and action of the normal irritant, is hard to say. It is, at least, probable. This hypothetical phase of the question does not, however, alter the opposed, definite side.

It is interesting to note the curious phenomenon of precocious menstruation—that occurring in the new-born child, and to explain it upon the basis of the ovarian secretion. There have been a few cases where true bleeding from the infantile uterus has been differentiated from traumatic hemorrhages of the genitals and urate stains. In one instance, the uterus in such a case was obtained and was found to present the typical microscopic picture of a decidua. Since the demonstration of

the passage of certain bacteria, and of certain chemical substances from the maternal into the foetal circulation, we can explain these marked instances of precociousness as due to the passage of the ovarian secretion of the mother, ovulating just at the time of the birth, into the foetus, and the irritant in the infantile circulation bringing about uterine changes sufficient to cause hemorrhage. We must admit also the probability of quite an extraordinarily well developed uterus. These cases are scientifically interesting merely from the standpoint of their rarity.

In conclusion, I wish to mention a fact that apparently gives well marked support to the co-relation between these two processes. The menstrual decidua and the decidua of the early pregnancy are identical. I refer to the former, before the stage of bleeding. The glands of Opitz are identical in both, and yet this investigator characterized these glands as being diagnostic of pregnancy alone. Typical decidua cells are present in both, and the dilated capillaries bounded by endothelium alone are equally present. Both deciduæ are the product of uterine hyperæmia and are formed to furnish a nidus for the ovum. If the ovum passes unfertilized, the hyperæmia subsides through bleeding—menstruation: if the ovum is fertilized, the hyperæmia persists to produce the changes occurring to characterize an older decidua. The decidua is formed for the ovum that is expelled a day or so prior to the regular menses. The menses appear only if the ovum is unfertilized, and so we may look upon every menstruation as a primitive abortion of an unfertilized ovum. The presence of a chemical irritant as the exciting cause for the uterine hyperæmia is naturally hypothetical. It is possible, and we can do no better than accept the theory as the most plausible until more thoroughly proven or disproven: at least, until a more probable hypothesis has been substituted for it.

A DOZEN EVERY-DAY REMEDIES.—A. K. Johnson, M. D., in the *Pacific Coast Journal of Homœopathy*, gives the following list of most frequently used medicines in the past year in his practice, San Bernardino, Cal: Gelsemium o, Bryonia o to 6, Veratrum viride, squibbs tincture, Arsenite of copper, 1-150 or 1-100 gr., Belladonna 3x, Aconite o or 2, Colchicine, say 1-100, Ferr. phos. 2 or 3d, Kali. Bich. 3x, Cimicif. o or 2x, Lycopus virg. o, Hydrastinmus.

SYMPTOMATIC PRESCRIBING.

BY E. FORNIAS, M. D.

It is strange, indeed, that Homœopathy should still be subjected to criticism. The school representing this system of therapeutics has grown so strong, so respected, so successful, that it seems madness or uncontrollable prejudice to indulge, at this late hour in unjust appreciations about its merits or defects. It is, really, to kick against an iron pillar. And, besides, cannot our chronic critics approach the lecture-halls and clinics of our institutions, not inferior to anyone in the country, and find out for themselves if we neglect *the underlying causes of disease*, and if we do not keep pace with every advancement deserving consideration, and that may aid us in the accomplishment of our aims. There, they can watch our labors, our assiduity, and the results attained by the system they censure. Then, the complement of all this activity and devotion, our critics could find in the Records of the State Board of Examiners, where the averages of success of our candidates are kept. The rest, the intelligent classes of our communities could tell them, for they judge of matters by their results, and know well the difference between efficiency and assumption.

That we have made wonderful advances in diagnosis we all must admit, but that therapeutics has kept pace with diagnosis, that is universally denied. Symptomatic prescribing has its limitations and shortcomings, but what are these compared with those of polypharmacy?

In many modern works on practice, as well as in the leading medical journals of the country we frequently meet with the adverb "*symptomatically*";—"pneumonia can only be treated symptomatically"—typhoid should be treated symptomatically, etc. Thirty years ago such expressions would have been rebuked with all the power of assumed authority. Dr. H. A. Hare, in the *Therapeutic Gazette* of January, 1906, commenting on a paper of Dr. Snader, in the *HAHNEMANNIAN MONTHLY* for October, 1905, states that "there can be no doubt that in many instances it is the function of the physician to administer remedies quite as much for the purpose of relieving symptoms as with the object of removing the causes which produce them." "In some instances the symptoms are, for the time being, of more importance than their provoking causes,

and in other instances they are of such great importance to the patient that they demand attention, although the physician may realize that the symptoms are, after all, *a very small part of the condition with which he has to deal.*" (The italics are mine.)

"In the past there has been a tendency on the part of the more scientific members of the profession, in their endeavors to discover the causes of disease to resort to preventive and curative measures which have not produced much impression upon the mind of the laity, which is not trained to consider the underlying causes of an illness." "On the other hand, those practitioners who have been wont to call themselves "homœopathists" have gone to the other extreme, and have founded a method of treatment which depends almost entirely upon the relief of symptoms with little regard to their underlying cause. "This fact has been an aid, in that it produced a favorable impression upon the mind of the patient, but at the same time it has exercised an inhibitory influence upon any tendency which these practitioners might develop to investigate the causes of disease."

Against this last paragraph I must earnestly protest, for every homœopathic physician, educated and uneducated, scientific or unscientific, has been taught from the very days of Hahnemann to study the causes of disease, as well as consider the patient's age, mode of living and diet, occupation, domestic circumstances and even his social position. Of course we adhere to symptomatic treatment, and this for the reason that it has given and continues to give us good results. Perhaps these favorable results are partly due to phagocytic activity or other natural defenses of the organism, as our illustrious opponents seem to have found out of late; but the fact remains that with strict individualization and symptomatic treatment we have our share of success, notwithstanding our ignorance as to the wonderful effects of all the drugs advertised in the cover-pages of all the journals published in this country. In a paper read to the nurses of the Women's Homœopathic Hospital on the 15th of this month, I have stated, and this is my belief, that *Etiology*, *Semeiology* and *Diagnosis* form the tripod upon which the task of the clinician rests. *Etiology*, because it deals with the causes capable of deranging the functions or altering the structure or tissues of the human body, as well as of compromising the cure, if not watched and prevented in

time. *Semeiology*, because systematically discusses symptoms, or, in other words, inquires into, studies and interprets the symptoms and signs of disease, and for obvious reasons our most valuable knowledge, for it does not only lead to a correct diagnosis and prognosis, but to the selection of the remedy according to our method of treatment. *Diagnosis*, because it points out and makes clear the existence, seat, nature, and the simple or complex stages of disease, as well as the degree of evolution they may attain before crisis or death takes place. It distinguishes one disease from another. It establishes a comparative parallel of two diseases more or less analagous to each other. It serves to satisfy inquiring relatives as to the probable issue of a disease; to report cases with system; to comply with sanitary laws; to make correct statistics; to protect the locality from infection and above all to determine whether or not a given case of disease is absolutely under the domain of therapeutics, or subordinate to surgery or other branch of medicine.

Nothing that we know or believe, however, debars us from applying any means capable of aiding the recuperative process, or alleviate suffering, whenever our remedies fail, but as a fundamental principle we are faithful to symptomatic treatment, as we know well what we can expect from it.

We cannot deny that in our ranks are found enthusiasts who still persist in believing that Homœopathy can dispense with pathology and diagnosis, but they are few. More numerous, however, are their antipodes, the black sheep of *similia*, who disappointed for some reason or other, pride in tempting the student to lower down the flag and follow *contraria* with all the sweet things it has to offer us. They parade as homœopathists; they constitute a hostile element in our school and surely they know by heart the latest derivatives of coal-tar, etc. I sincerely believe that such diametrically opposed elements could not exist in any school of medicine but for the fact that sixty per cent. of all human ailments do get well by the unaided efforts of nature. No physician of any school however can afford to ignore the character, origin and meaning of symptoms, for they are the manifestations of disease in its various forms and aspects.

Tanner, of England, much quoted by the late Dr. Dickenson, of Philadelphia, said: "Without a correct knowledge of

symptomatology—the science which treats of the symptoms and signs of disease—we can know but little of the art of medicine; since a thorough acquaintance with the structural and functional disorders to which the human body is liable, essentially comprises a recognition of existing symptoms and signs, a proper appreciation of their value, source, antecedents, causes, relations and connections with each other, and the results which may be expected to flow from them singly or in combination.” And as it was thirty years ago, so it is to-day; symptoms remain the indications of disturbed function and altered tissue, microbe or no microbe.

Sir Thomas Watson defined symptoms as follows: “Everything or circumstance happening in the body of a sick person, and capable of being perceived by himself or by others, which can be made to assist our judgment concerning the seat or the nature of the disease, its probable course and termination, or its proper treatment—every such thing or circumstances is a symptom.”

And, in our days, one of the great intellects of France, and a great clinician, thus expresses himself about symptoms: “*Present or actual signs of disease* are abnormal phenomena felt by the patient or perceived by the physician, existing at same time with the disease.” “They are destined to disappear with the disease of which they form a part, they are created by the lesions that constitute them, they guide directly to the derangement of the organ affected or of the apparatus attacked, and they are the leading elements of physical and medical diagnosis. But a symptom, he says, does not become a sign of disease until it is interpreted by the one in position to appreciate its indication and reach its cause.” The symptom, in fact, is under the domain of the senses, and can only be detected while it exists. The sign, on the other hand, is related to the judgment; it is a conclusion arrived at by the spirit of the symptoms observed or by the anamnestic circumstances. Symptoms should not be confounded then with actual signs until reasoning has judged of their value. Hence, all symptoms are signs, because the latter could not exist without the former, but all signs are not symptoms.

I do not believe that any physician can at any time, during the course of a disease, realize that the symptoms are, after all, a very small part of the condition with which he has to deal,

for, it is the symptoms that warn us of the approach of danger, no matter what the cause may be—it is the symptoms that point out the amount of damage suffered by the organs or tissues, it is the symptoms that augur the probable termination of a case, and as stated above they are the leading elements of diagnosis.

In the same number of the journal where the paper of Dr. Snader is commented upon, our attention is called to an interesting communication on the subject of prescribing by Dr. Wm. Murrell, who is held by the commentor as peculiarly qualified to speak with the voice of authority upon anything pertaining to materia medica and therapeutics. "The gist of his contention is that medical men are wont to drift into a purposeless and enervating monotony in prescribing." His main illustration is taken from tincture of nux vomica, which some years ago was shown to be ordered more frequently than any other drug or preparation as the result of an analysis of over 25,000 prescriptions. "Nowadays the man in the street is so universally intelligent that he has a nodding acquaintance with most of the drugs in common use." "There is a great deal of force," says the commentor again, "in Dr. Murrell's contention that the patient who finds nux vomica in every prescription quite irrespective of the nature of the ailment from which he may be suffering is apt to lose faith in the originality of orthodox members of the profession, and to drift into the hands of quacks. The matter, as far as that goes, might be put much more forcibly. The difference between the skilled medical man and the quack is that the scientific man commands a host of remedies with understanding and adaptation, while the charlatan simply and sheerly by rule of thumb uses a few drugs of which he knows nothing, judged from the scientific standpoint." "Dr. Murrell suggests the substitution of ignatia bean, for the 'interminable' nux vomica. As a matter of fact, both tinctures contain strychnine and brucine. The usefulness of ignatia appears to be as wide as that of the corresponding tincture of nux vomica, while it *apparently exerts a special controlling influence in hysterical cases.*" These definitive lines are headed by others no less interesting, which I now give: "The administration of drugs, like other branches of practical medicine, is undoubtedly undergoing a species of evolution. It has gained in accuracy and efficiency by the enor-

mous strides that have been made in our modern knowledge of *materia medica*. At the same time, the developments of surgery have cut deep into the faith that was formerly attached to the efficacy of drugs. This attitude of doubt and interrogation has been further emphasized by the clearer insight into the intimate causation of many morbid conditions afforded by the science of bacteriology. In spite of the profound alterations in the treatment of disease that has been brought about in the foregoing and in other ways, there yet remains a great margin of symptomatic and obscure ailments which come within the province of the physician to alleviate or cure. In other words, medicine has not yet attained the footing of an exact science, and its disciples have still to trust in many instances to a more or less purely empiric art." "The practitioner of to-day is furnished with so vast an armory of remedies that he may well be excused for dismissing the majority of them with scant courtesy, while he confines his practice to the changes rung upon a score or so of well-tried and familiar medicaments." "The attempt to cut the Gordian knot in this fashion is likely to curtail the success of the practitioner. In any case he will do well to consider the advisability of adding a little variety to his prescriptions, for his own sake as well as for the benefit of his patients."

It is unnecessary to make any remarks on this scientific parley; it speaks for itself. It certainly embraces a great deal that is logic. No wonder that the cry of the day is prophylaxis! Probably the majority of the scientific practitioners have come to the conclusion that therapeutics is no match for *phagocytosis* and the formations of *anticorps* (agglutines, precipitines, etc.), or, as Bail, of Vienna, wishes us to call them, *microbic aggressins*. At any rate we can well assert that even with our extensive knowledge of etiology and bacteriology our means of contention with microbic attacks are very limited.

Le Dantec, in his "Introduction to General Pathology," has grouped, in a general way, all the phenomena resulting from the introduction into a healthy organism of any foreign element whatever. These strange phenomena in appearance can be brought over to a small number of very concise formulæ, borrowed from the prolific language of organic equilibrium, which, we must admit, have in the last few years rebuilt the physico-chemical sciences. And Charrin, in his excellent

work on "Les Defenses Naturelles de l'Organism," asserts that phagocytosis exerts its influence with equal force on foreign bodies, or chemical substances, as upon microbes. The globules, says Charrin, show themselves phagocytic; they seize the infinitesimals, dust, foreign substances and soluble compounds as in the case of small particles of charcoal, vermilion, peptones, etc. Carbo. vegetabilis is included in the list, a drug which has been the subject of much sarcasm, not only by our detractors, but in our ranks, and this notwithstanding the fact that it has been found to be both a tonic and a febrifuge and that when taken internally is absorbed into the system. Ebenhard and Charrin have detected its presence in various parts of the human body, and Oesterlen discovered it in the blood of the mesenteric veins and the vena porta, and in the liver and the lungs of animals which had been fed on food containing it. In these cases the surface of the intestinal canal was found perfectly healthy. Moreover, Brinton, in his "Action of Medicines," remarks, that charcoal is more efficacious when given in the powdered form, and admits that one really does not know how it acts in dyspepsia. These are certainly results which every homœopathist should bear in mind when studying this remedy.

Wherever we look we will find that the rôle played by microbes on the genesis of disease is to-day so important with certain practitioners, that really it seems as if etiology, which looks after morbid causes of any kind should be reduced to very narrow limits. According to them, pathogenesis teaches us how to know the manner of working of the morbid causes revealed by etiology. So, then, *etiology* only teaches why one gets ill; *pathogenesis* establishes how one becomes ill. *Semeiology* is a secondary matter with them. On the other hand, such a high authority as Huchard states that a medical consultation to arrive at a physiological and analytic therapeutics, must embrace questions of clinics, diagnosis, prognosis, etiology, pathogenesis and semeiology, for it proceeds from them all, and above all from a correct diagnosis, which cannot be made without the others. Little theory and plenty of practice is the demand of clinics. Practice is what one does; theory only what one knows, and to this science could be applied the words of the poet: "*On avance toujours, on n'arrive jamais.*" The practitioner has nothing to expect from borrowed erudi-

tion or with the scientific exhibitions of ever-growing theories without practical sanction. He should certainly not delight in the irksome and fruitless work of Penelope, building to-day what will be destroyed to-morrow. He needs to know to act, not to discourse. "It is time," he says, "to rid one's self of the tyrannical doctrine, which having always made the disease dependent on the lesion, has paralyzed for many long years our therapeutic action."—(*Consultations Medicales.*) This is the manner in which our opponents discuss their new affairs.

And, if, after all, as Dr. Villechauvaix claims, the medicine like the microbe can provoke in the organism the same reactionary phenomena and the same defensive processes, could we not under this point of view, consider Homœopathy the art of healing by stimulating the protecting agents of our health. The favorable results of our treatment seem to substantiate this position. The future will tell the rest, and there is hope in this direction, for, at least, no one can impugn to-day the efficacy of infinitesimal quantities of various salts in altering and destroying microbic life and development. The biological investigations going on constantly are daily revealing uncontrovertible facts strongly supporting our claims as to the value of high dilutions in the treatment of disease. Of the latest researches, perhaps the most important for us are those of Prof. W. Oswald, of the University of Leipzig, on the crystallization of oversaturated substances, that is overchilled by the addition of traces of the same substances or rather of an isomorphous substance. These experiments proved that in a solution of that kind, crystallization takes place immediately after the least trace of the substance contained in the solution was added. The experiments were carried on with salol, thymol, borax, etc., by the aid of homœopathic triturations prepared at the Central Homœopathic Pharmacy of Leipzig. They clearly established that the phenomena of crystallization were produced even with the ninth decimal attenuation, which is about a millionth of a grain (*Stüdien über die Bildung und Umwandlung fester Körper*).

In the *American Journal of the Medical Sciences* for May, 1905, appeared three original articles upon the action of minute quantities of copper as a germicide in pollutable waters. In the first, Pennington, its author, claims that the germicidal action is entirely dependent on the copper as is shown by sub-

stituting for it platinum electrodes. In the second, Gildersleeve concludes that dilute solutions of copper have a marked destructive action on many bacteria. Colloidal copper will quickly destroy certain bacteria (probably platinum will destroy others). Should copper vessels or plates be used to destroy bacteria in water they must be kept highly polished, or the bactericidal properties will be greatly reduced. He has, Gildersleeve, no evidence to show that copper, ingested in small quantities for long periods, has any detrimental action on the health of an individual. The most important contribution is certainly that of Stewart, who asserts that sterile drinking water in *clean copper vessels inoculated with typhoid bacilli* invariably showed that the bacilli had all perished in one hour. Water similarly treated in *tin vessels*, invariably showed living organisms at the end of twenty-four hours. Water similarly treated in *aluminum vessels* showed a disappearance of the typhoid organism in three hours. The quantity of colloidal copper given off from one-liter copper vessel in three hours was one part to four million. This amount killed off the added typhoid organisms in from one and three-fourths to two and one-half hours, and chemical experience has shown that this amount of colloidal copper is harmless when taken into the human system. "In epidemics of typhoid fever water could be purified of typhoid organisms by allowing it to stand in a copper vessel for three hours."

These authentic assertions bring to my mind an interesting little story about an eminent practitioner of Philadelphia, who took delight in running down Dr. Lippe, whenever he had an opportunity, and who certainly would rise from his grave if he were to know that water treated in tin vessels had shown, in our days, to destroy living organism after twenty-four hours' exposure. The story told in my presence by a lady of high standing, about the criticism of Dr. Lippe's treatment, runs as follows: It seems that a lady who had been benefited a great deal by a few doses of "stannum" 30, prescribed by Dr. Lippe, lauded at a family reunion the ability of her physician in the presence of the allopathic critic, who on finding out the name and dose of the remedy, exclaimed, "Why, madame, you might as well have taken water from a tin cup! I suppose," he added, "your physician, like Hahnemann, can cure Asiatic cholera by drinking water from a copper kettle." The copper kettles to-day are not such paradoxical things after all.

Similar biological researches as the above have been, however, long ago elucidated. In 1891 we had already authentic reports on the laboratory labors of Loew and Rokorny, which were really the starting point of later studies. Raullin, right after, succeeded in showing that nitrate of silver in the proportion of one part in 1,600,000 parts of water would inhibit the growth of the *Aspergillus Niger*, and still further discovered that this organism would not live in water placed within a silver vessel, although no silver can be detected in the fluid with the most sensitive reagents. But to the distinguished botanist, Carl von Nagali, we owe the interesting verifications which seem to have established the problem on solid bases. He called the unknown force of bacterial destruction *oligodynamia*. (*Ueber oligodynamische Erscheinungen in lebenden Zellen*, Zürich, 1891). This first study revealed the fact that in the presence of the most diluted solution of nitrate of silver, the filaments of spirogyra could not live. He found that death occurred in three or four minutes in a solution of 1-1,000,000,000,000,000,000. In such a solution there could not be more than one or two molecules of the salt to each litre. Mercurius sublimatus corrosivus (Hg. Cl.) gave even more pronounced results; the organism died in a solution of 1-1,000,000,000,000,000,000,000,000. This solution could contain but a trillionth of a molecule in a litre. He discovered that many substances, hitherto reputed insoluble in water, such as the metals, gold, silver, copper, iron, mercury, lead and zinc, could render the water toxic by their mere presence. He was able, by employing gold coins placed in vessels of water, to vary the amount of toxic force according to the number of coins placed in the water, and to the time during which they remained there; and finally, his next step in the investigation revealed the fact that this *oligodynamic power* could be neutralized by adding to the water powdered substances, such as flour, salt, cellulose, soot, carbon, etc.; results clearly showing much of the absurdity of polypharmacy.

H. Huchard, in his "Consultations Médicales," discusses admirably the chemical, physiological and therapeutical antagonism of medicamental associations, and every practitioner who wishes to keep up with the times should read them.

Here is another little matter which may become good nourishing material to the brain of thinkers. "According to van t'

Hoff, substances held in solution act like gases, and this observer has shown that the laws of Boyle-Mariotte, Gay-Lussac, and Avogadro apply to these substances as well as they do to gases. The dissolved molecules behave exactly like the molecules of a gas, which exert a pressure upon the wall of the containing vessel by their endeavor to diffuse themselves through the greatest possible space." (Sahli.)

Those who think Homœopathy is not taking any marked interest in these biological researches, that concern her so much, are greatly mistaken. Jousset, Sr., Villechauvaix, and Vannier have been of late paying a great deal of attention to all experiments revealing the toxic power of infinitesimal quantities of metallic substances as well as to their applications to prophylaxis and therapeutics. We are certainly watching and measuring the progress of sero-therapia, sero-diagnosis, radiography, cyto-diagnosis, etc., and also weighing the results which may come to support our claims as to the small dose and the single remedy. And above all, we hope that Dr. Vannier, of Rouen, may continue the work so enthusiastically begun and already so prolific in results, about the tests to discover the presence of infinitesimal quantities of metallic salts in our high dilutions.

NOTE.—I expect to report very soon the results of Dr. Vannier's experiments.

ATROPIN AND HOMATROPIN AS CYCLOPLEGICS, RELATIVE ACTIONS OF.—The writer concludes that homatropin is not in any way as efficient a cycloplegic as atropin. The solution of 1 grain to the drachm, one drop in each eye every three to five minutes until eight to ten instillations are made, seems to be as efficient and safe a solution as any. Homatropin usually, if not always, is inefficient in cases that suffer a great deal from eye-strain, whether there be any indication of retinal or choroidal congestion or not. It is advisable to inform the patient that the examination may only be tentative, and that they may have to return for further treatment under atropin. The use of homatropin is especially indicated in cases that do not suffer severely, and have no time to lose from their work. Homatropin is not efficient in children. Atropin is the most desirable cycloplegic to use with children, and should be employed in most cases. It is by giving accurate corrections in these cases that intraocular diseases can be prevented that might incapacitate the patient for life. Homatropin has an unrivaled field in elderly subjects for dilating the pupils for a more perfect fundus examination. It is also to be commended in troublesome cases near or above the age of 40, in which a long cycloplegic action is not desirable, also, to enable one to detect slight degrees of astigmatism by means of retinoscopy.—Oscar Wilkinson, *The Homœopath Eye, Ear and Th. Jour.*

THE COUGH OF ACONITE—A STUDY.

BY WM. A. SEIBERT, M. D., EASTON, PA.

(Read before the Philadelphia County Homœopathic Medical Society.)

THE cough of aconite has been chosen as the subject of a little study, for no particular reason of preference. The fever of aconite, the sore-throat of belladonna, the pains of bryonia, the cough of phosphorus, the headache of gelsemium, the rheumatism of rhus tox., the diarrhœa of rheum, etc., would have been more popular, and that fact perhaps has inclined me at least not to prefer these topics. My object is to outline what I have found to be an interesting method of studying our *Materia Medica*, adapted for those who, fresh from college, like to deal with scientifically accurate facts and phenomena, scientifically arranged. Imbued with the truth of Homœopathy's claim, many are at the outset disheartened by the Babel of symptomatology that our *Materia Medicas* present for study, or it may be by the very many apparent incongruities as the "epitomes," "manuals," "primers," "pearls," "hand-books," "pocket-books," "element essentials," "bee-lines," "characteristics," "key-notes," etc., are compared. And then, adding dismay, comes along the professor, who perhaps himself only dimly comprehends what is meant by the "genius" of a remedy, and for an hour at a time he tries to inculcate at one bound into our green minds this knowledge that is acquired only after years of study and comparison, if it be not *in re* a God-given gift that only a very few seem to be able to perfect themselves in.

Not the cough that aconite *may cure*, but the cough that aconite has been known to produce and cure, and will again produce in provers and cure in the sick. Accepted facts that cannot evoke much debate, and indeed can probably not be very much enlarged upon even by an Institute of Drug Proving, laudable as its object is. Aconite *may cure* many, many varieties of cough, when not essential to, or at least not included in the similimum of the case,—when, in other words, it is not one of the necessary three points of support, though a symptom of the case in question. Its cure may be explained homœopathically, and the particular kind of cough may be

placed among the symptoms of aconite for the students to accept as a verification. However true, such and similar complexities confuse and discourage the student. But the cough that aconite produces, is an incontrovertible fact, definite as day, and one of the large links in a scientifically constructed chain. After it is comprehended, then the investigation of and comparison with the *cured* symptoms will enlarge the scope of vision, or as Hering says "complement all other *Materia Medica*," and the whole process become fascinating instead of discouraging and confusing. Then to compare the results with any or many condensations and compends, that are unwisely recommended and so eagerly purchased by the students, will explain fully the apparent incongruities, that do confuse the beginner and shake the orthodoxy of many who would not like to be classed with beginners. Again, after the cough of aconite has thus been gone through with, a comparison with similar coughs produced and cured by other remedies could be instituted, and by the time the subject would be exhausted in this manner, you must agree, much more of our science would be learned than the mere cough of aconite. The limits of this paper prevent the full illustration of the plan, but we shall give a sufficient elaboration of the idea to show its feasibility.

Let us see. Read carefully the symptoms of cough under aconite, observed and collected by Hahnemann and his disciples and from old-school authorities, as recorded in "*Materia Medica Pura*," and analyze and arrange them. The method of analysis and arrangement is arbitrary. Hering recommended the saw-buck method of arranging symptoms in prescribing for a case, and a similar method might be pursued in analyzing and arranging the individual symptoms: "Sensations, Localities and Tissues, Conditions or better Modalities, Concomitants." Dr. Conrad Wesselhoeft recommended a somewhat similar method of analyzing symptoms: "Kind of Sensation, Part Affected, Time, Condition." Let us adopt as follows for our purpose:

1. Character of Cough;
2. Exciting Cause, and its Location;
3. Conditions accompanying and following the Cough;
4. Conditions of Aggravation and Amelioration.

MATERIA MEDICA PURA.

1. Character of Cough:
 - Dry.
 - Short.
 - Severe.
 - Choking.
2. Exciting Cause and its Location:
 - Upper part of Larynx—Tickling.
3. Conditions accompanying and following the Cough:
 - Hæmoptysis.
4. Conditions of Aggravation and Amelioration:
 - During heat of body.
 - After drinking.
 - From a little tobacco smoke (in smokers).
 - After midnight, every half hour, a short cough, the more he tried to suppress it, the more frequent and worse it was.

This analysis includes every symptom of cough under aconite, and it is noteworthy that none of them merited capitalization by Hahnemann.

Now analyze and arrange the cough symptoms compiled by Dr. Allen in his

ENCYCLOPEDIA OF PURE MATERIA MEDICA,

being a record of all the positive effects of drugs upon the healthy human organism to the year 1877:

1. Character of Cough:
 - Dry.
 - Short.
 - Severe—Forcible—Uncontrollable—Violent.
 - Choking.
 - Frequent.
 - Hacking.
 - Hoarse.
 - Loud.
 - Hemming.
2. Location of Exciting Cause:
 - Larynx—Tickling.
 - Irritation.

Trachea—Raw feeling.

Throat—Scratching.

Epiglottis—Tickling.

3. Conditions accompanying and following the Cough:

Larynx—Pain.

Smarting.

Chest—Raw pain.

Painful shootings in different parts of chest
compelling him to lie always on back, and
preventing his lying on either side.

Great strain.

Oppression.

Severe pains from the shock.

Anus—Cramp-like constriction.

Eyes—Tears in eyes.

A little fluid is brought into the mouth, of a sweetish
salt taste like blood, tasted only at root of tongue.

Morning cough with blood-streaked expectoration.

4. Aggravations, Ameliorations, and direct results of the cough:

<going from warm room into open air.

Food and drink easily pass into windpipe on swallow-
ing.

<after midnight, every half hour, the more it is
attempted to be repressed the more frequent and
severe.

<lying on either side.

<from change of temperature.

<towards evening.

<drinking water.

<during heat of body.

<warm room.

<during sleep.

<from tobacco smoke (in smokers).

>lying on back.

Coughing >difficult respiration.

This includes all that Dr. Allen has been able to compile about the cough that aconite has produced. To make his work practical as possible, he distinguished those symptoms which have been verified, *i. e.*, repeatedly cured, by stars, with italics,

or full-faced type; the latter class the most important. This order has been maintained in this arrangement—the first in order being the most frequently verified.

The next step consists in the reading the interesting narratives of aconite pathogenesis, as collated in

A CYCLOPEDIA OF DRUG PATHOGENESY.

This cyclopedia contains a compilation of the physiological effects of drugs upon the healthy human organism and the results of experiments on the lower animals, written mostly in interesting narrative form. These narratives do not include the most valuable pathogeneses of Hahnemann and his fellow provers, and therefore are very interesting for the purpose of verification and comparison, if not as supplementing the “*Materia Medica Pura*” and “*Chronic Diseases*.” It will be discovered also that the “*Cyclopedia of Drug Pathogenesis*” presumes to revise Dr. Allen’s *Encyclopedia*. In reading through these narratives it is an easy matter to write out every symptom of cough occurring therein, and analyzing and arranging them precisely as was done in the previous illustrations:

1. Character of Cough:
 - Dry—Harassing dry.
 - Short.
 - Violent.
 - Choking.
 - Frequent—Constant.
 - Slight—Fatiguing.
 - Hawking.
 - Hoarse, dry, resonant.
 - Violent with peculiar dull tone.
2. Location of Exciting Cause:
 - Larynx—Burning pain.
 - Tickling.
 - Trachea—Roughness.
 - Throat—Scraping.
3. Conditions accompanying and following the cough:
 - Larynx—Pain.
 - Chest—Sharp stitches in various parts of thorax.
 - Periodical stitches through chest.
 - Sore feeling behind sternum.

Aching, burning pains in course of wind-pipe, down to scrobiculus corcordis.

Cough fatiguing chest.

Great weakness.

Oppression of chest.

Shaking pains of whole chest.

Expectoration—occasionally brownish-red, rust-colored.

Occasionally bright red blood, without pains in chest.

Mucus streaked with blood.

Viscid mucus.

Scanty, frothy mucus.

Gelatinous formed mucus.

Anus—contracts spasmodically.

Eyes—water.

Shooting pressive headache.

4. Aggravations and Ameliorations:

< coming from open air into warm room.

< warmth.

< in change of temperature.

< 3 P. M.

< breathing deeply.

< lying on either side.

> lying down.

Lastly, let us analyze and arrange similarly the symptoms collected in

HERING'S GUIDING SYMPTOMS.

Hahnemann advised, in a note under alumina in "Chronic Diseases," not to be ruled by former cures, but always by the symptoms produced; and Hering said in his preface that "A cured symptom only, has never such an intrinsic value as one produced and cured, and yet, such a one should not be ignored; in course of time it may be added to the characteristics." This cyclopedia contains principally cured symptoms, and as Hering remarks, "is a complement to all other works on our *Materia Medica*."

I. Character of Cough:

Clear, ringing or whistling.

Hoarse, dry, loud.

Spasmodic, rough, cracking.

Dry, croupy, suffocating.

Violent hollow cough (at night).

Shorter and more panting (during day).

Dry, short, forcible.

Short (after 12 P. M.).

Dry.

Hollow, hoarse, choking (causing blue face).

Dry, barking.

Dry, whistling.

Frequent (with severe pains from shock through chest).

2. Location of Exciting Cause:

Larynx—Burning, pricking.

Tickling.

Trachea—Burning, pricking.

Throat—Scratching.

3. Conditions accompanying and following the cough:

Wants to cough but cannot (Croup).

Danger of suffocation.

Hæmoptysis: blood comes up with an easy hawking, hemming or slight cough.

Sputa: Absent.

Bloody or blood-streaked.

Bright red blood.

Scanty, falls in round lumps, dark cherry-red (Pneumonia).

Thin, gelatinous, more mornings and during day.

(Dry cough) with shooting in chest; with raw pain in chest.

Brownish-red, rust-colored.

Severe pains from shock through chest (cough frequent).

Nervous excitability.

4. Aggravations, Ameliorations, and Direct Results of the Cough:

<at night (violent, hollow).

<during day (short and panting).

<lying on either side.

<after 12 P. M. (short); the more he attempts to

suppress it the more frequent and severe it becomes.

<change of temperature (dry).

<after eating or drinking.

<lying, must sit up from a constrictive feeling and suffocation (Tracheitis) until 3 A. M.

<evening, night, more after 12 P. M.

<during sleep.

<from vexation, especially fright.

<from tobacco smoke.

>lying on back.

Cough awakens from sleep.

Cough from dry, cold winds, currents of air.

(Hollow, hoarse, choking cough) causing blueness of face.

Diseases :

Infantile bronchitis.

Pneumonia.

Laryngitis.

Croup (wants to cough but cannot).

Measles (dry, barking).

Pertussis (beginning).

Tracheitis.

Hering's four marks of distinction to mark the relative value of symptoms has been observed in this arrangement, by the order of enumeration.

Now the student is ready to draw reasonably accurate conclusions. First, with reference to the "Character of the Cough." Every one of the varieties of cough portrayed in the analyses of cough symptoms in "Materia Medica Pura," "Allen's Encyclopedia," and "The Cyclopedia of Drug Pathogenesis," has been produced in the healthy human organism. Every one of these appearing in the sick should be curable by aconite if our law is valid. But "one swallow never makes a summer," and one isolated symptom never makes a disease. One of the necessary fundamental principles of Homœopathy is that the totality of disease symptoms constitutes the disease, and consequently symptom-matching may be a puerile effort followed by failure to cure. At least "three points of support" has been accepted as an apt mechanical illustration. These varieties of "Character of Cough"

may be variously combined in the same case, thus complicating and confusing the search for the similimum, and the true similimum is undoubtedly rarely found to match precisely the recorded symptoms in our provings, but the basis of our science is similarity, not sameness, hence the closest approximation of disease symptoms to drug proving symptoms has produced these most marvelous effects of cure that have startled the world during the past century. The verifications, as collated in Hering's "Guiding Symptoms," therefore, being the most frequent combinations thus far observed, will help the merest tyro to the following conclusions:

1. The Character of the cough cured is *most apt* to be:
Dry, Short, Severe, Hoarse, Loud, or Croupy.
2. The Exciting Cause and its Location is *most apt* to be:
Larynx—Burning, or Tickling.
Trachea—Burning.
Throat—Scratching.
3. The conditions accompanying and following the cough are *most apt* to be:
Larynx—Pain.
Chest—Stitches, or Soreness.
Expectoration—Bloody occasionally.
4. Aggravations, Ameliorations, and Direct Results of the cough are *most apt* to be:
<at night.
<lying on either side.
<from change of temperature.
<from eating or drinking.
>lying on back.

We have now from these four authorities a fairly complete enumeration and analysis of the aconite cough symptoms, and there is thus far no confusion or discouragement, and who dares question these facts! But let the student now take up a study of the aconite cough as exhibited in the many compends and condensations that are intended to be memorized by beginners as introductory studies to our Materia Medica, and confusion and discouragement results in proportion to the size of the library of such works that he has access to. Result: a second rate specialist generally, and the loss of a good homœopath frequently. However, having studied the cough of aconite after the manner outlined, the apparent incongrui-

ties will gradually melt away into arbitrary opinions of what is and what is not worth remembering, and the worthlessness of the bulk of these books as students' aids becomes therefore the next scientifically established fact. It was my original desire to take up in chronological order these epitomes, and to show that they are not as a rule inconsistent, but they represent the arbitrary opinions of the authors as to what is and what is not therefore essential—at least for beginners. Some give preference to pure provings, discarding altogether clinical symptoms, others confine themselves almost exclusively to the latter. Others again deem the precise language of the prover as inspired and hallowed, and still others theorize us into pathological vagaries that make the confusion of the student complete. I believe that the multiplication of epitomes is as detrimental to the comprehension of our science by beginners as they are interesting and valuable for review.

The next step that suggests itself in completing our little study, is a comparison of the aconite cough with other coughs. "*Repetitio est mater studiorum*" is an old quotation that I should like to modernize into "*Repetitio et comparatio sunt parentes studiorum.*" The great value of the comparative method in science is perhaps nowhere better illustrated than in the study of anatomy. As it is thereby possible to determine what is universal and essential, and what local and accidental, and as it throws a flood of light upon problematical and rudimentary structures, and as it may fairly be said that it is impossible to properly comprehend any structure of the human body without considering it in relation to similar structures in other animals,—so almost with equal force may it be maintained similarly with reference to *Materia Medica*. Dr. Gross in his introduction to his comparative *Materia Medica* says "the diagnostics of one remedy offer a supplement and correction to another, and also show one and the same remedy in different lights." The fact at once confronts us in this study that to compare the aconite cough with the cough of all other remedies bearing any resemblances whatever, means to compare with several hundred remedies, and the same old "ghost of Banquo" looms up in all his glory. There is only one Magliabechi on record in history so that the advantage of studying dictionaries, cyclopedias and repertories is problematical for students. Upwards of one hundred remedies have a dry cough,

in their pathogenesis, more have a short and severe cough, still more a tickling, etc. Furthermore Hahnemann in the *Organon*, in section 153, draws attention to the fact that any symptom common to many remedies is of little value in prescribing. The relative value and importance of symptoms in provings and disease is confusing at any rate, and unless their relative importance is clearly comprehended, much confusion is certain. It must be remembered that the symptoms of most use in the diagnosis of disease, the pathognomonic symptoms, are generally of least use in the selection of the remedy, and the more common symptoms of the provings are generally of the least value in prescribing. Nevertheless the pathognomonic symptoms are necessary for the diagnosis of the disease, and the symptoms common to many provers necessary for studying the remedies. Moreover for the same reason that the comparison of all remedies containing a symptom common to many remedies is gratuitous besides being cyclopedic, so a comparison of all remedies containing only the peculiar symptoms is puerile. Now another matter: Frequently the "key-note" or "characteristic" symptom method of prescribing is exploited; and while not agreeing with the idea in that form, neither believing that Dr. Guernsey intended as much, yet in comparing and differentiating the various remedies having a cough similar to aconite, if "the nervous, feverish, restlessness, and fear of death" be borne in mind, the differentiation will often be simplified.

The matter of selecting the remedies, and their actual comparisons, together with the previously referred to consideration of the various epitomes, must be the subject of a future paper. Their study will be as interesting as we trust the matters here presented have been.

The object of this little study has been to interest and not discourage, convince and not confuse, in studying this most difficult of subjects. At the same time the keen realization is acknowledged that the remedy aconite has not been learned at all, nor even when to prescribe aconite for a cough. Yet much has been learned in such a little effort, and that too without offending the ultra-scientists. Its object has also been to disabuse a surprisingly prevalent opinion that there is a lack of uniformity in our *Materia Medica*, and to impress the fact that Homœopathy will respond to scientific tests, when intelligently applied.

CLINICAL EXPERIENCE WITH HYDRAGOGIN.

CLIFFORD MITCHELL, M. D., CHICAGO.

I NOTICED in a recent number of the *HAHNEMANNIAN* that reference was made to an article of mine in the *Clinique* on the preparation known as hydragogin. The latter has been on sale by the down town drug houses here for so many years that I did not deem it necessary to say where it could be procured. There have also been references to it in medical literature for five or ten years. The price of the article is indeed high, but in my experience a little of it goes a great way. To obtain the physiological effect fifteen drops as a maximum dose are given hourly for 36 hours, when the patient is awake, after which the remedy is given in smaller doses three or four times daily for a few days and then discontinued. As a matter of fact, however, smaller doses may be used with success as will be shown by the account of cases given below.

In regard to the positive assertions which I have made in the past as to the efficacy of hydragogin let me be understood correctly. I do not claim anything for it in the last stage of chronic contracted kidney, when both heart and kidneys have practically ceased functioning. I have tried it in one such case merely as a last resort and without success. Furthermore it is without beneficial effect, so far as I can judge, from my experience with one case, in syphilis of the kidney. In this case characterized by extreme albuminuria and edema, it produced merely a slight temporary lessening of the edema without marked diuresis and with no effect on the quantity of albumin in the urine.

But there are a number of cases of chronic heart and kidney diseases in which the heart and kidneys are still capable of functioning in response to powerful stimulus. One such case I have reported in my recent work "Diseases of the Urinary Organs," page 190. This patient, who was helpless when the treatment began, recovered sufficiently to be able to work and lived for several years afterward.

A more recent case of interest is as follows: Patient, a man of 65, with previous history of recent good health so far as known, except that three years ago an oculist had found an inequality of vision. In October, 1905, he began to be troubled with dyspnoea and edema of the lower extremities.

Later there was fluid in the lower part of the abdomen. It was found that the left ventricle of the heart was enlarged and somewhat dilated; the dyspnœa increased so that he could not sleep in the recumbent posture; the pulse became rapid, (around 100) and more or less irregular. Examination of the urine showed 630 c. c. (21 fl. oz.) in 24 hours, a distinct trace of albumin, and in the sediment of 15 c. c. of the urine I found a dozen very large granular and waxy casts. The length of the casts was unusual indicating involvement of the straight collecting tubules.

Further analysis of the urine showed the following:

- Oct. 18th.—Urine, 28 fl. oz. in 24 hours.
Albumin, plain trace.
Large waxy casts numerous.
A few hyaline and granular casts.
- Nov. 3d.—Urine, 16 fl. oz.
Albumin, traces.
Large, waxy casts quite plenty.
- Nov. 11th.—Urine, 14 fl. oz.
Albumin, trace.
A few hyaline, granular and waxy casts.
- Nov. 17th.—Urine, 20 fl. oz.
Albumin, trace.
Ten or twelve casts, mostly hyaline.
- Nov. 24th.—Urine, 19 fl. oz.
Albumin, plain trace.
Casts hyaline, granular, waxy.
- Dec. 12th.—Urine, 16 fl. oz.
Albumin, nearly to second mark on Esbach tube.
Numerous large, waxy and granular casts.

The patient during this period (Oct. 10th to Dec. 12th) had been given by his physicians, Epsom salt, elaterium, nitroglycerine, strychnine, calomel, podophyllum, and apocynum. None of these drugs availed to help him. Dec. 19th I was called in consultation and confirmed the diagnosis of chronic contracted kidney already made by his family doctor. The presence of waxy casts made me suspect an amyloid complication, but as there was nothing else about the case which suggested this condition I advised the use of hydragogin. It was given in five drop doses every three hours during the first day. The dose was increased a drop each day, until he took eight drops every three hours. He was put on milk diet for a day or two and subsequently on a non-nitrogenous one. Ten days afterward the analysis showed the following:

Urine, 64 fl. oz. in 24 hours.

Albumin, trace.

Half dozen yellow-granular and waxy casts.

The patient steadily improved. On January 22d the urine analysis showed the following:

Urine, 40 fl. oz. in 24 hours.

Albumin, faint trace.

Two small casts.

Edema was now all gone, dyspnoea gone. Patient able to go up and down stairs and to play billiards without discomfort.

The hydragogin was gradually decreased after the tenth day. He is now taking four drops three times daily. Plans to go South before long.

Dr. Samuel Brown Pulliam, of Paducah, Kentucky, has kindly given me the particulars of another case in which the diuretic effect of the preparation was shown in a remarkable way. The patient was a man 65 years of age, six feet high, weighing 228 pounds when taken ill three years ago; present weight 175 pounds. Following the loss of his wife he became afflicted with violent palpitations of the heart, asthmatic breathing, and slight cough. There was great weakness and mental irritability. The face, hands and wrists were edematous and ascites was marked. The abdomen, thighs, legs, and feet were enormously swollen and the skin extremely sensitive. Dyspnoea was severe and the patient unable, on account of it to sleep more than ten or fifteen minutes at a time. Heart enlarged, pulse weak, irregular and hard to count, bowels constipated. Dr. Pulliam gave him hydragogin in doses of five drops every hour for 36 hours with the patient on milk, six ounces of the latter every four hours. The next day he passed three quarts of urine, the second day *five and one-half gallons*, after which the hydragogin was given in 10 drop doses five times daily.

From the 16th of January to the 19th inclusive he passed in all eight gallons of urine. On the 21st the hydragogin was stopped. On the 20th he had the first normal stool in a year. The edema disappeared and there was four inches "slack" in the waist band of his trousers. He is at last reports able to lie down in bed and to sleep the greater part of the night, his appetite is good, the bowels move naturally one to three times daily, and he no longer complains of weakness. Says he feels better than during any time within two years.

COMMUNICATIONS.

"LEST WE FORGET."

AN ADDRESS AUTHORIZED BY THE REGULAR HOMŒOPATHIC
MEDICAL SOCIETY OF CHICAGO.

TRUTH is unchangeable and uncompromising. Wherever found it is in perfect harmony with all other truth. Whenever and wherever you find discord you may rest assured that something has been allowed to creep in that is false, and *that* something must be removed before harmony can be restored. To just the degree that truth is made to yield to the demands of error will the results be unsatisfactory and real progress retarded.

Homœopathy stands for a law of cure. It is founded upon a truth and has been demonstrated not only by means of its works, but by reason of its harmonious relation with all other established truths. To-day the Homœopathic profession is divided into two uncompromising factions. Either one is right, or both are wrong. By their fruits shall we know them.

It is a specious plea that Homœopathy is limited in its action, and that consequently our students must be taught everything in medicine; but alas and alack, the time has been too short for everything, *so Homœopathy is being crowded out.*

The public asks for Homœopathy and is given to understand that it is receiving the very best Homœopathy in the market,—a strictly, modern, up-to-date, twentieth century inspiration. The public knows no better, and oftentimes the physician shows equally limited knowledge of the real truth, for his practice is *thoroughly consistent with much of the teaching received* while attending a homœopathic (?) college.

The old cry against the "narrow," "dogmatic," "sectarian" spirit of Homœopathy is heard no more. On the contrary, the old barriers are being removed and the door swings wide open to the "modern" homœopath—and why not when there has been such a complete surrender of everything that savors of Homœopathy? Mark this radical difference, however, be-

tween the recreant Homœopath and the convert from the empirical teachings of the "old school"—the first departed from the faith because he was not willing to make the close application required of a faithful follower of Hahnemann, and, for the same reason, usually is content with the discarded practice of a past decade, while the convert to Homœopathy invariably insists upon the strictest application of the teachings of Hahnemann.

Were it a matter of individual opinion our lips would be closed, because it is the inalienable right of every thoughtful man or woman to act as his or her best judgment may dictate (provided the common rights of humanity are not encroached upon by such acts); but when these would-be-leaders, these self-constituted moulders of medical thought adopt the tactics of their erstwhile enemies by treating with ridicule the conscientious efforts of Homœopathic practitioners, and, wherever possible, closing the door of opportunity in the face of those who would challenge their teaching, the time has come when the mass of Homœopathic practitioners should rise up in their might and repudiate the leadership of such false teachers.

If we read the signs correctly, the time is right and the profession ready to begin an aggressive campaign for the restoration of Homœopathy to its logical place in the domain of medicine. This is to be no ephemeral movement, but the beginning of a struggle that will be most vigorously pushed until the banner of Homœopathy shall have been rescued from the hands of its traducers and restored to its former proud position as the synonym of law and truth. It bases its expectations of success upon the convincing power of its "law of cure" successfully applied; the comprehensive scope of its organization and the earnestness of its adherents.

To-day Chicago is recognized as the "Homœopathic Center of the World." It therefore seems natural that this new movement should find a focal center at this point; and the logical outgrowth of the protest which has been made for many years is found in the organization of

THE REGULAR HOMOEOPATHIC MEDICAL SOCIETY.

It is actuated by the single purpose of preserving and promoting the principles of Homœopathy, and will co-operate

with any individual or organization having a similar purpose. Its declaration of principles is broad enough for any honest follower of Hahnemann and at the same time simple enough to admit of no misunderstanding. No attempt is made to dictate the practical application of those principles. That is left to the judgment of the individual; but every known means will be employed to make the application of those principles so simple that the temptation to resort to doubtful expedients will be continually lessened.

About seventy-five responded to the first general call, February 6, 1906, when the following declaration of principles was adopted:

First.—The law of similars is the law of cure.

Second.—The single, *similar* remedy is the only scientific prescription.

Third.—The proper dose is the minimum amount sufficient to cure (the potency being left to the discretion of the physician).

Fourth.—The indicated remedy is the remedy based upon the totality of the symptoms in each individual case (totality meaning the sum total of the deviation from the normal state).

NOTE.—This Society recognizes that there may be times in the practice of individual members when, not knowing what else to do, they may think it necessary to resort to palliative measures. While such treatment may seem justifiable, and will be tolerated, it is nevertheless *un-homœopathic* and is not endorsed by this Society.

The officers elected were:

President, A. C. Cowperthwaite.

First Vice-President, H. C. Allen.

Second Vice-President, D. M. MacMullen.

Secretary, G. P. Waring.

Treasurer, H. H. Baker.

Executive Committee: President (ex-officio), E. A. Taylor, H. Farrington, J. B. S. King, J. W. Hingston, H. W. Pierson, G. P. Waring.

Regular meetings of this Society will be held on the first Tuesday night of each month at 8.00 o'clock. Stenographic reports of each meeting will be made, and a bound copy of the transactions for the year may become the property of each member. For the present the yearly dues have been placed at two dollars.

A cordial invitation is extended to all Homœopathic physicians who can attend to become members. Other cities and localities are also urged to organize where the Regular Homœopaths desire to co-operate in the above plan to preserve and promote Homœopathy.

GUERNSEY P. WARING,

Chicago, Feb. 15, 1906.

Secretary.

A NEW YORK STATE PROVING.

AN OPEN LETTER:

The homœopathic physicians of Massachusetts have recently completed a valuable re-proving of belladonna. It is proposed that New York State add its quota to materia medica by a drug proving for 1906.

The drug chosen will be a plant of which some clinical account is given in homœopathic literature, but of which no scientific proving has been made. The drug will be supplied in tincture, 3rd, 12th, 30th, 200th, 1000th.

Homœopathic physicians are requested to signify their willingness to prove the "unknown quantity" by sending a postal to the chairman of the Drug-Proving Committee (Hom. Med. Society, County of New York) and Bureau of Materia Medica (Hom. Med. Society State of New York), address below, when the drug will be forwarded. Any of the laity whom physicians may enlist in this work, and who will be under their observation during the use of the drug, will also be supplied (through the physician).

Before such proving, a careful anamnesis should be recorded (all records should be kept on or transferred to, legal cap, one side of the sheet only); six ounces (including sediment) of a 24 hrs. urine (add gtt X formalin) should be sent (with name, address, quantity in 24 hrs., reaction when passed) to the official Pathologist, Dr. P. D. Saylor, 133-137 West 47th St., N. Y. City, for examination. The blood count (before and after the proving) will also be taken by the Pathologist, Dr. Saylor, when it is possible; otherwise by the nearest physician with the apparatus; or disregarded if impossible to obtain.

Where it is possible, provers are requested to have exami-

nation made by specialists in the various branches that the proving may be of greater value.

It is desired that every practitioner enter, *to some extent*, into the proving. For example, a few doses of the tincture or potency may be taken until *some* disturbance of cellular or functional equilibrium is noted:—constipation, headache, insomnia, drowsiness, thirst, increased or lessened appetite, etc. When the *direction* of this disturbance is thus indicated, the drug may be stopped if the individual do not care to continue its study, and in this way a mass of confirmatory and valuable evidence from many sources will accumulate.

Furthermore, the preliminary knowledge thus gained by the physician will lend additional interest in, and appreciation of the full proving of the drug.

In these self-provings, Sec. 120-141 of The Organon should be consulted. Physicians in other States than New York who would like to take part in the proving will be most welcome, will be supplied with the drug, and full credit will be given.

The proving will begin with each individual whenever he or she is ready, preferably before May 1st, that the results may be early tabulated for publication.

Fraternally,

P. W. SHEDD, M. D.,

113 West 71st St., New York City.

Chairman, Drug-Proving Committee, N. Y. County Society, *Dr. G. De Wayne Hallett, Pres.*

Chairman, Materia Medica Bureau, N. Y. State Society, *Dr. DeWitt G. Wilcox, Pres.*

Drug-Proving Committee: P. W. Shedd, M. D., Chairman, L. M. Stanton, M. D., W. H. Dieffenbach, M. D., J. B. Garrison, M. D., Spencer Carleton, M. D.

EDITORIAL.

THE COMING SESSION OF THE INTERNATIONAL HOMŒOPATHIC CONGRESS AND OF THE AMERICAN INSTITUTE OF HOMŒOPATHY.

HOMŒOPATHIC physicians all over the world are looking forward with interest and enthusiasm to what promises to be one of the largest and most important gatherings in the history of the Homœopathic school—namely, the joint meetings of the International Homœopathic Congress and the American Institute of Homœopathy to be held at Atlantic City in September, 1906.

Atlantic City is peculiarly adapted for such a meeting. The hotel accommodations are ample for an unlimited number of visitors and the local committee has arranged to have ample room for all the various committees and sectional societies. Aside from these advantages, the numerous amusements, the invigorating sea air and fine bathing, make it a delightful place for the physician and his family to spend a pleasant week's vacation. Many of the committees have already started active work. At a meeting of the Executive Committee of the American Institute of Homœopathy and the Special Committee on the International Homœopathic Congress, held in New York, January 31st and February 1st, it was decided to hold the Congress, beginning on Monday, the 10th of September, and ending Saturday the 15th.

It was also decided to open the Institute's sessions at three o'clock on Monday afternoon, September 10th, and to hold the preliminary meeting of the Congress on the same afternoon at four-thirty; to have the formal opening of the Congress on Monday evening, this meeting to be of a somewhat popular nature as is the case with the opening meetings of the Institute itself. The president of the Institute to have a conspicuous part in this meeting of the Congress. It was also decided to have the Institute's business sessions held daily from nine to ten; to give the time from ten to one o'clock daily to the Congress; and to ask the special societies to hold their sessions during the afternoons and evenings of the week, the

Congress also to have afternoon and evening sessions. It was decided to devote Tuesday to the discussion of the Principles and Propagandism of Homœopathy; Wednesday, to the study of *Materia Medica* (drug pathogenesis, provings, etc.); Thursday, to Clinical Medicine; Friday, to Pediatrics and Sanitary Science; Saturday to be used for adjourned meetings and concluding exercises.

The local committee representing the homœopathic physicians of Atlantic City are working hard to make this the largest meeting of the Institute. Let every homœopathic physician throughout the land become imbued with the same spirit and this year will prove a memorable one for Homœopathy.

AN ADDITIONAL TALK ON GRAFT AND FINANCE.

WE have on several occasions made editorial remarks concerning this subject. We have spoken in such positive terms that it would seem impossible to misunderstand us. And yet we feel that it will be of advantage if we take up the old subject once more. But a few weeks ago, one of our life-long professional friends died. He was a poor man; and yet he had saved from his professional earnings no less a sum than one hundred thousand dollars, nearly all of which had been lost by badly advised investments. He was an easy mark! He was too confiding! And yet he but represented a large class of physicians who place their hard earned dollars in insecure investments.

Within two months we received a communication from the advertising department of a certain concern offering to send us a certain commodity, the price of which was seventy dollars. We were told that if we liked it, we should write a testimonial similar in character to those appended, and the commodity would be ours. Of course the wording of the letter does not suggest that we should do anything unprincipled; nevertheless, it was in our opinion bribery. The knowledge that testimonials are thus bought makes it impossible for the consumer to place any credence in testimonials of any kind. In the purchase of books, instruments, etc., one should depend upon his own judgment, or, if he has not had the necessary experience to select for himself, let him depend upon the advice of a friend.

As we have stated in a previous editorial, physicians and

others should observe great care as to the contracts they sign. Very many physicians have since learned this to their sorrow. Canvassers do not hesitate in many instances to make the grossest misrepresentations to secure an order, and employers "wink at" their practical dishonesty. Here is a recent instance. A physician of this city refused to pay for a certain commodity because he alleged the goods were not as promised. The collector told him that if he did not pay he would be sued. The physician thought it better to pay under the circumstances, and he gave the man a check for the amount, *i. e.*, thirty dollars. As the collector pocketed the check he remarked: "Smith (mentioning the name of the canvasser) was a pretty slick article was he not?" Our readers will interpret this remark as we did, that Smith's slick methods were known to and highly appreciated by his employers, and that after getting their money, they were willing to glory in their possession of such an individual. It is a pity that there is no law to permit us to enter suit against business men of this stamp.

We are overrun with men who solicit subscriptions to certain stock companies. Here is one instance! A land company that will surely pay us one hundred per cent. per annum. And when we take up the circular or prospectus, what great names we see! And yet if the affair is genuine can it be possible that men with unlimited capital should be willing to permit us, poor insignificant physicians as we are, to share in such a gold mine? Would they not unaided by us, put in the whole capital amounting to but a paltry half million? Nothing is so greedy as capital. It is constantly watching for good investments. Capital is also conservative. It is satisfied with a small profit and good security. When such great returns are promised, there is something wrong with the security part of the proposition.

And still another, which we understand is catching the public with astonishing success. The promoter says: "We will allot you a limited number of shares, and only a limited number, because we want you with us. (How that did tickle our vanity). Your five hundred dollars will be worth \$20,000 in ten years' time." This was alluring to us. We were to make forty dollars for every one invested, and in the meantime to draw enormous dividends. And all the while we were

wondering why the promoter should be so good to us,—a stranger. We could see the halo about his head, and the sprouting wings fresh from the feather foundry. And we waited for the colored gentleman to come from behind the wood pile! And he came! We were to become customers of the concern before we could get our allotment. And our contract as a customer compelled us to pay in the course of the term of years for which it was to run, over \$10,000. Of course we were led to expect \$20,000 in return, dividends in perpetuity, and the return of the money expended as a customer, so that if everything turned out as promised, we would make a handsome thing out of it. But we refrained, and rested content to miss a good thing, and remain poor.

THE REGULATION OF PROSTITUTION.

No class of affections is more prevalent throughout the entire world than venereal diseases. If there is any difference between barbarous and civilized communities as to the percentage of those afflicted with such diseases, it must be shamefully confessed that they are more prevalent in countries where civilization and education are supposed to have exerted an elevating influence.

Various remedies have been proposed from time to time to check the spread of these diseases, and to eliminate the so-called "social evil." In our own country the attitude toward prostitution has been that of absolute indifference. As long as the prostitutes and their patrons have refrained from such riotous and disorderly conduct as would make them a public nuisance they have remained practically undisturbed by the law and unnoticed by the members of the community about them.

As might be readily anticipated the results of this attitude have been disastrous. Venereal diseases flourish throughout our entire land affecting all classes of society, the rich and the poor, the educated and the ignorant, and even virtuous women and innocent children suffer from the curse transmitted to them by an infected husband or father.

It is not necessary to dwell upon the moral degradation which attends this state of society—destructive as it is to the life of our nation—for the physical suffering alone which results from these diseases is sufficient cause both for earnest thought and vigorous action.

The remedy which has been repeatedly proposed during the last decade has been that of governmental regulation and control. This is by no means a new idea. For over forty years this system has been carried out in France and other European countries, and carried out with a thoroughness and exactness which would be impossible in a nation like our own. It would seem reasonable that a study of conditions as they exist in those countries would demonstrate the efficiency or the inefficiency of state control in diminishing the prevalence of venereal diseases.

In the opinion of those authorities who have had the opportunity of studying this question abroad, the governmental regulation of prostitution is not only ineffective but often tends to make matters worse. Dr. Howard A Kelley, speaking on this subject, says: "*Règlementation* or regulation has been so thoroughly tested in Europe, and with such conspicuous failure, that the Society of Sanitary and Moral Prophylaxis, in taking up the question of dealing with the social evil and its attendant diseases, does not even propose to discuss at its meetings any papers advocating regulation." Professor van Ijsselstein, who for several years had charge of the examinations and regulation of prostitutes at The Hague, concludes that public prostitution has no effect in preventing the spread of venereal diseases and that it is a decided disadvantage to the public health.

From a purely medical standpoint a serious objection to the regulation of prostitution is the difficulty of determining whether or not a prostitute is free from contagion. Professor van Ijsselstein says that "In order that examinations shall afford a sufficient guarantee against possible contagion, it must be possible to isolate, not only the women afflicted with contagious venereal disease, but also those under suspicion of it." Thorough daily examinations are necessary and even then it is difficult to detect the mild types of syphilitic manifestations, and many women are capable of inoculating a man with gonorrhea long after any visible signs of the disease have disappeared. It is apparent that to conduct such thorough medical examinations would be very difficult, and where large numbers of women must be daily examined, practically impossible. As might be expected the physicians who are willing to devote their time to such work are not the most learned or the most

conscientious, and in the vast majority of instances where public prostitutes are examined these examinations are superficial and unreliable. Dr. van Ijsselstein in relating his experience in this work at The Hague states that "in the course of my unexpected visits to brothels, I was obliged to send some two-thirds of the women examined to hospitals, either because they were infected or because they were suspected of being so. And even then I was not secure of the remaining third, although they could not be retired, because it would have been dangerous to empty the public houses of debauch. From all that has been said I feel myself justified in drawing the conclusion that such a thing as a safe public prostitute does not exist."

Many advocates of public prostitutes contend that while state examination does not eliminate all infected women, it nevertheless secures the isolation of the more marked cases and thus diminishes the chances of infection. Experience shows, however, that the number of men who patronize houses of prostitution considerably increases when it is known that the inmates are subject to medical examinations and therefore are supposed to be free from any contagious disease. Consequently many persons become infected with venereal diseases who otherwise would have been restrained by fear from frequenting houses of prostitution.

For the government to give its sanction to the establishment of public houses of prostitution would therefore, we believe, be a step backward instead of forward. The interests of the commonwealth and of the individual demand that the governmental powers shall be exerted to suppress rather than to encourage these public houses of vice and debauchery.

While it is clearly the duty of the government to oppose and to forbid the establishment of houses of prostitution we must remember that the ultimate solution of this problem is beyond the power of states or of legislators. The origin of this evil lies in the degeneration of society and in the moral corruption of the individuals. If the social evil is to be curbed and the spread of venereal diseases to be checked, we must find some method of elevating the moral tone of the people. The individual man and woman must be taught habits of cleanliness, of decency and of self control. This is a hard task but unless it can be accomplished we see little reason to believe that the prevalency of venereal diseases will be diminished.

GLEANINGS.

THE PRESENT STATUS OF BLOOD CRYOSCOPY IN DETERMINING THE FUNCTIONAL ACTIVITY OF THE KIDNEYS.—Edwin Beer, M. D., in the *American Journal of the Medical Sciences* for February, 1906, states this new method applied to the kidneys consists in the determination of the molecular concentration of the blood by means of freezing it. Normally blood or plasma freezes at 56° C. If the blood is more or less concentrated, the freezing will be respectively lower or higher. In other words, if the blood is less concentrated, it will freeze before 56° C. is reached, but if the concentration is increased, freezing will not occur till the thermometer has fallen lower.

As a matter of fact the kidneys appear to be the most important regulators of the concentration of the blood, but other experiments go to show that there are other factors to be considered. Bendix has shown the concentration of the blood in kidney disease may be diminished by sweating: Koranyi that changes in skin secretion may lead to changes in concentration of blood. It is not at all unlikely that liver secretion, gastro-intestinal excretion and secretion under certain conditions, may also influence the concentration of the blood. Disturbance of the blood and lymph circulation will also affect the concentration of the blood. Moreover disturbances in proteid metabolism, anemias, acetonaemia, as well as the nature of the patient's diet, affect the concentration of the blood. All of these conditions may affect the blood's concentration, and that is particularly clearly seen in some cases of anuria. Both Israel and Roosing have reported cases in which for four days the kidneys ceased secreting, still despite this the concentration remained a normal one. The following diseases show marked concentration of the blood with normal kidney activity, non-compensated endocarditis, cirrhosis, epilepsy, large abdominal tumors, acute gout, prodromal stages of malaria, terminal stages of malignant tumors. The fact that the concentration of the blood may be increased in all these conditions without there being a renal insufficiency or renal disease shows very clearly that the kidneys are not the only organs that regulate the molecular concentration of the blood. He then discusses the subject of reflex anuria, and renal insufficiency, and summarizes as follows:

1. The kidneys, though the most important organs in regulating the molecular concentration and osmotic pressure of the blood, are not the only organs, etc., concerned with this intricate process.

2. An anatomically normal or almost normal kidney may be so disturbed in its functional activity as to appear seriously diseased, being temporarily incapable of excreting its quota of molecules.

3. The concentration of the blood may be normal, equal, 56° C., even

though the kidneys are functionally inactive and anatomically very badly diseased.

4. The concentration of the blood may be increased to 60° C., or higher, contraindicating any removal of kidney tissue according to Kümmell, even though the second kidney is anatomically normal, but is suffering from a functional disturbance produced by nervous reflexes, or by toxins which come to it through the circulation from the other diseased kidney.

5. The concentration of the blood may be markedly increased, even though both kidneys are in good condition.

6. In bilateral disease, as Roosing has pointed out, if nephrectomy is done with normal concentration, the operator may remove in the diseased organ the majority of the functioning tissue of the kidneys and thus bring on uræmia and death, because the renal tissue left in the patient is inadequate for the excretory work.

7. The list of cases that have survived a nephrectomy, despite high molecular concentration, 60° C., is steadily growing. Many that Kümmell would refuse to operate radically because of excessive molecular concentration probably could be cured by partial or complete nephrectomy.

8. Patients with normal freezing point do not necessarily survive the operation and are not in any way ensured against subsequent uræmia.

9. In a large number of cases high concentration corresponds to bilateral kidney disease, but as yet we are unable to decide which cases of high concentration are not of renal origin and vice-versa, which cases of low concentration are suffering or likely to suffer from renal insufficiency.

10. Cryoscopy of the blood, as yet gives us but little absolutely accurate information as to the present activity of the kidneys; much less, naturally, does it tell us of the outlook, as it is in nowise capable of measuring the compensatory hypertrophy, which may develop in any kidney.

G. MORRIS GOLDEN, M. D.

A NEW POINT IN THE PROGNOSIS OF TYPHOID FEVER.—Simon, *British Medical Journal*, November 18, 1905, looks on the amount of urine passed in the later stages of typhoid fever as a guide of the utmost value in prognosis. Towards the beginning of the fourth week, seldom earlier, at times a little later, the urine increases in quantity from thirty ounces, to sixty, eighty, or even one hundred ounces daily. The author's observations made during the last nine years show that polyuria occurs not only in every case that does well, but also in many cases of great severity in which no general improvement or amelioration of symptoms can be observed. But even in severe cases, if polyuria occurs, the patients recover. It is not necessary, in order to estimate the value of polyuria as a means of prognosis, that the patient should be in a state to voluntarily empty his bladder. In no case with polyuria has perforation been observed nor any hemorrhage of any moment. Further, relapse is of the most extreme rarity, once polyuria has been established.—*Medical Review of Reviews*, January 25, 1906.

G. MORRIS GOLDEN, M. D.

THE THERAPEUTICAL AND PROGNOSTIC VALUE OF OCCULT HEMORRHAGE IN THE STOOLS.—J. Dutton Steel states the symptom has won for itself a

permanent place in the symptom complex of ulcer of the stomach and duodenum. That the symptom is capable of being used in the regulation of the diet in the determination of the prognosis, and also enabling the surgeon and physician to co-operate with greater certainty and success in the conduct of the treatment. He then speaks of the liability of error, and under what conditions it should be performed, but when properly performed is a valuable link in the evidence of the presence or absence of an ulcer.

The occurrence of occult blood in the stools is considered, stating that blood does not occur in every stool of ulcer, as in cancer. That it may be intermitting in its appearance, and in the chronic forms may be absent for a month or more, showing the advisability of examining frequent stools. That its presence is always a confirmation of a diagnosis which has been made from other symptoms. It is of special value in the following conditions: 1. The differentiation of true ulcer from stomach pain due to neurosis, especially when the latter is accompanied with hyperacidity. 2. In the recognition of chronic gastric ulcer. This form is often apparently latent, with few clinical symptoms, and occasional occult blood in the stools. He then reports two such cases:

The therapeutical and prognostic value is then considered, the test being used to determine the length of the various periods of medical treatment. That bleeding should disappear within a week after a milk diet, and as soon as bleeding disappears, the diet may be increased. If bleeding recurs during increase of diet, indicates change is being made too rapidly. Persistent recurrence of hemorrhage when a change from liquid to solid food has been tried a number of times, would indicate little or no tendency to heal and require surgical intervention; he then reports such a case.

The persistence of bleeding under strict milk diet, would seem of bad prognostic evidence, but its significance is not clearly understood. Boas in this connection states: "I have often observed that the persistence of hemorrhage while the patient is upon a strict milk diet is almost always an indication that proper healing will not take place. When bleeding recurs in this manner in people beyond middle age, development of cancer upon the ulcer must always be suspected. The author then cites a case in which such a recurrent hemorrhage was present during a strict milk diet, and complete recovery followed.

In conclusion he summarizes as follows: It is of value; 1. To determine the length of the various periods of the medical treatment of ulcer. 2. To detect the tendency to bleeding during the course of gastric ulcer, and by appropriate medical and surgical measures to anticipate and prevent serious hemorrhage. 3. To determine when the medical treatment may be considered to fail and surgical treatment is indicated. 4. Perhaps the test may prove helpful under certain circumstances in detecting the development of a cancer upon the floor of an ulcer.—*New York Medical Journal*, January 26, 1906.

G. MORRIS GOLDEN, M. D.

EXAMINATION OF THE PANCREAS.—The pancreas is hardly accessible to physical examination. The examination of this organ by deep palpation is made between the umbilicus and the xiphoid cartilage. By dilating the stomach artificially one drives back the tumors of the pancreas, but this

sign is of small value if we consider that tumors of the posterior wall of the stomach suffer the same change of position. The functional examination of this organ teaches: (1) That the pancreatic juice digests albuminoid matters in an alkaline medium.—*Technique of Schmidt*: The patient absorbs small cones of meat wrapped in gauze. If the pancreas is healthy, the meat is digested. (2) In subjects affected with a lesion of the pancreas, not far advanced, the dissociation of the fat into fatty acids and into glycerin is very active.—*Technique of Commidge*: The urine of pancreatics contains an abnormal quantity of glycerin taken by the kidney within the circulating blood. This glycerin is transformed into glycerose by a mineral acid (nitric, sulphuric). Its presence is readily detected by the appearance of microscopic crystals given by these bodies with phenylhydrazin.

Remarks: This research does not imply that the pancreatic channels are permeable, that the pancreatic juice is poured out into the intestine. The experiments of Lombroso have, in fact, proved that the pancreas induces in the organism a peculiar state, in consequence of which the fatty substances are abundantly absorbed, even when the excretory channels have been bound. This permeability may be appreciated by the following procedure:

Test of Sahli: Make the patient take in one gramme of salol, which, by the action of the pancreatic juice, becomes separated in the intestine into salicylic acid and phenic acid. Look for the salicylic acid in the urine. The renal impermeability, is a source of error that should be previously eliminated by the methylene blue test. The test of Sahli may fail on account of the intermittent secretion of the pancreatic juice, hence the experiment should be repeated several times. (3) The chronic lesions of the pancreas are often associated with diabetes. These chronic lesions co-exist also frequently with hepatic troubles. Therefore the presence of glycerose in the urine is a presumptive sign in favor of a primitive or secondary pancreatitis. (4) Far advanced lesions of the pancreas, by suppressing almost completely the dissociation and absorption of fat, are attended with rapid emaciation. (5) The ductus choledochus may be compressed by a tumor at the head of the pancreas, giving rise to a more or less chronic icterus. In certain cases, where the ductus borders only on the pancreas (variable anatomical situation) there is absence of icterus. (6) The bronzed coloration of the skin and the absence of indican in the urine (Eichhorst) should be taken into consideration.—Champeaux.

Medical Semeiology.

E. FORNIAS, M. D.

PROPHYLAXIS OF HEREDITARY SYPHILIS.—The prophylaxis of hereditary syphilis rests with marriage.

Before Marriage. To prevent the procreation of children, threatened by hereditary syphilis, the conditions of assent to marriage should be the following:

1. *The absence of actual specific accidents*, dangerous for the mother (direct contamination, conceptional syphilis) and for the child (abortion, hereditary syphilis).

2. *The advanced age of the diathesis.* The older the syphilis, the less

the danger to marry. The syphilis of the generator, male or female, should be of long duration, three years at least. The activity of heredity attains its maximum during the first year of the syphilis; in general it retains its intensity for about three years, then decreases and finally disappears, though its manifestations have been observed at the end of 12 and even 15 years.

3. *A certain period of absolute immunity.* The syphilis should not exhibit the least specific manifestation for over three months.

4. *The mild character of the malady.* A syphilis assuming early malignity should be a counterindication to marriage.

5. *A sufficient specific treatment.* Allow marriage only to a syphilitic patient who has been regularly treated three years at least; no less than two years of mercurial treatment and one year of mixed treatment. As a precaution add another condition; impose on a syphilitic who intends to marry, two more months of specific treatment.

Unless a syphilitic should comply with these conditions, he is unfit to marry or procreate.

After the Marriage: (a) On the part of the husband, or both husband and wife:

1. If the syphilitic accidents are recent or recur, interdict conjugal relations and prescribe the specific treatment.

2. If there is no contagious affection, avoid pregnancy.

(b) *On the part of the wife.* Should she be treated if pregnant? Two cases may occur:

1. The wife knows she has syphilis. In this case the treatment is easy, as she will consent to it.

2. The wife does not know that she has syphilis, but she must be treated, for the question is to preserve the child. Therefore it is necessary to enjoin on the mother a specific, methodic and prolonged treatment. It should be done even when all the chances indicate an improbable infection; it should, above all, be ordered if the mother is syphilitic, (A. Fournier), but even if she remains safe, she should be treated, for the infection may be latent or pass unnoticed. The treatment cannot do serious harm, and may be profitable to both mother and child.

After Birth. 2. Treatment of infantile syphilis. Should all children born syphilitic be treated? Let us hear the opinion of Dr. Fournier on the subject:

1. An infant born healthy from a syphilitic father requires no treatment.

2. An infant born healthy of an old syphilitic mother, but without accident during pregnancy, is not to be treated.

3. An infant born healthy of a mother recently syphilitic should be energetically treated.

4. An infant born healthy from a syphilitic father, who infected his wife during pregnancy, should be always treated.

In all other cases, treat the child from the moment the first symptoms appear.

(c) *Lactation.* 1. A syphilitic mother, if she can, should always nurse her child. She should not nurse, however, when suffering from severe syphilis.

2. A non-syphilitic mother, in appearance, ought to nurse her child born syphilitic.—*Law Baumis, Colles. Medicine Infantile, Legrand.*

E. FORNIAS, M. D.

METHYLENE BLUE TEST. (Achard and Castaigne.) This test has for its object to inquire into the experimental permeability of the kidney by means of a foreign substance introduced in the organism. The substance recommended by Achard is pure methylene blue, in solution of 1 gramme to 20, which is injected at a dose of 1 cubic centimetre into the muscular tissue of the glutens. The bladder is previously emptied, and right after the injection the urine is collected every half hour, until it shows the blue coloration. After the urine becomes colored, it suffices to gather it every hour, in separate vessels. At the beginning and at the end, if the color of the urine is not yet very distinct, the examination of the amount taken should be made in a test-tube, and looked through its depth (Hutin). If the urine contains above all colorless chromogen, the tint can be accentuated by heating with acetic acid.

The curve of elimination can be traced on a card, to ascertain the beginning, the end, the maximum and the rhythm of elimination. In the normal state the curve is as follows:

Beginning: Half an hour after the injection.

End: 36 hours after the injection.

Maximum: 3 hours after the injection.

Rhythm: Continuous, cyclical.

The curve rises rapidly, remains en plateau and descends rapidly.

In those suffering from Bright's disease the ascent is slow, the plateau not very distinct, the descent trailing, the rhythm polycyclic or intermittent. The intermittency in the elimination is, according to Chauffard and Cavaise, principally due to functional trouble of the liver.

Remark: If instead of the blue, 20 grammes of urea are given, the curve is perceptibly the same.—*Champeaux, Semeiologie Medicale.*

E. FORNIAS, M. D.

CARE OF THE INSANE AND DEMENTED.—Now that the spirit of reform seems to have taken the good city of Philadelphia by assault, and, especially that a man of the aptitude and knowledge of Dr. Coplin has been selected by the reformers to correct such evils as have been found prevailing at the Almshouse, it is natural that one should turn his eye to other centres of civilization to inquire about the methods employed for the protection of the poor, and principally for the care of the insane and demented poor. It was my privilege to meet, in 1900, a man who has just died in Paris, and who had worked incessantly at the depot (municipal office for the examination of the poor, insane and degenerate) for the welfare of this unfortunate class of society. Dr. Paul Garnier left behind work and example worthy to emulate. With his sudden death not only France, but the whole medical world has lost one of its greatest specialists, and as his eulogist, Dr. Ernest Dupré says, his demise has struck an unexpected and very painful blow to the medical fraternity,—also to Paris, where he was one of the best known personalities,—to the bench, for he was the expert

psychiatric most heard in court,—and finally to the police department, where in the special infirmary "*du Depot*," he had to decide as to the classification and disposition of the ill-fated creatures. There, he performed for many long years the most delicate functions a physician could assume *vis-a-vis* public opinion.

I mention Garnier, because no man that I know of took more earnestly and assiduously the work, and raised the voice higher to urge the classification and separation of the insane. In no other country, do I think, has a man appeared who, like Garnier, has so successfully solved this arduous demographic problem. But, while Garnier is dead, his works remain, and anyone interested in the subject and wishing to follow step by step his labors, need only study his well-known valuable writings.

In his "*Traite de Therapeutique des Maladies Mentales et Nerveuses*," published by J. B. Baillière et Fils, Paris, he has not only recorded the practical teachings his long experience with the alienated, suggested, but he gives, in a most original way, a historical and practical account of clino-therapia, as well as of the results observed in other Service d'admission of Paris, about the method of treating acute psychopathic conditions by continued isolation and bed-keeping. The question of hospitalization, however, which concerns us so much now, is treated still more extensively. He insists upon the separation of the insane in different asylums, according to classes, namely:

1. Clinical asylum (*asile clinique*) for the alienate in the course of treatment, slightly different from the ordinary hospital.
2. Asylum of restraint (*asile de surete*) for the dangerous, thoroughly irresponsible.
3. Prison-Asylum (*asile-prison*) for criminals who become insane while serving their time.
4. Lunatic Asylum (*asile-hospice* or *colonie*) for inoffensive chronic cases and the demented.

If one desires to appreciate his work better, let him read *La Folie a Paris*, published by the same house, a book which offers the most substantial and living study, on the course and behavior of mental alienation in the large cities. The statistics have been taken directly from the centres of the evil and the clinical tables drawn up after nature and by expert hands. We see defile before us in kaleidoscopic masses an endless variety of the most rare and dramatic types of insanity, at the very moment when these mental disorders by the glitter and noise of their manifestation, come to drag their victims to their centre and customary existence. The truth and motion of life enliven these pages, where the lamented Garnier evokes, by the palpitating descriptions of realism, the image of these unfortunate beings, despoiled of the most noble attributes of man. We notice, in the delirant and mad parade, the results of the enfeebled will, transformed into automatic, violent and anxious impulses. We contemplate the erratic and other psycho-motor displays, indicative of sexual perversion. We observe how the intelligence misled by hallucinations or autosuggestions is unable to distinguish between right and wrong. We note the exalted sentiment, abased or abolished, replaced by a total absence of the most natural affections. We take notice of the contortions and grimaces of the maniac, the plaints and appeals of the hysterical, the gloom and shyness of the melancholic, the desperate confessions and prayers of the mystic, the moanings

of the hypochondriac, the elocution of the ambitious, the indecision and fears of the neurasthenic, the lamentations and avowals of the obsédés, perverted and impulsive, and finally the ramblings and incoherences of the demented, who are not only deprived of intellect, but of will and memory.

But Garnier does not only furnish us with figures and the most exact statistics; he has established the law of vernal outbreak of mental alienation; the intimate relations in the parallelism of the continued progression of alcoholism, on the one side, and of the general paralysis and other forms of degenerations on the other. He distinguishes the different clinical aspects of inebriation in relation with the cerebral soil and nature of the intoxicant. He describes the excito-motor, hallucinatory and delirant forms, which the inebriating attack assumes, following the reacting tendencies of the intoxicant. Moreover, he formulates the most judicious medico-legal conclusions about the relation of criminality with alcoholism and the various forms of mental alienation (instinctive perversions, genésic aberrations, moral insanity, mania of persecution, &c.).

Equally important is the question of vice. Paul Garnier has dedicated a series of papers to the subject, and I do not know, in the delicate problems of psycho-pathology and of legal medicine, of more interesting studies. In his renowned work, "Les Fétichistes," he has given the results of his long medico-legal experience on psycho-sexual anomalies. He furnishes the student with finished descriptions and complete and precise definitions of the different syndromes of genital perversion (fétichisme, sadisme, sadi-fétichisme, masochisme, exhibionisme, uranisme, erotomanie). He points out the reciprocal affinity of these divers syndromes, their relation with mental degeneration, their occasional origin in an initial emotional shock, the emotional shock which guides the genital activity of the predisposed towards the abnormal inclination and determines the creation of equivalents of sexual relation, in the pathological manifestations which become the source of the multiple attempts known.—*Le Mois Medico-Chirurgical*.

E. FORNIAS, M. D.

RELIEF OF CARDIOPATHIC ATTACKS BY ABSTINENCE FROM SALT.—In one of the summer sessions of the *Société Médicale Des Hôpitaux*, Drs. Vaquez and Digne demonstrated that the ingestion of Chloride of Sodium, is capable by itself of producing, in subjects in a state of cardiac mesopragia, the symptoms of asystolia. They found extremely interesting to investigate, how the elimination of chlorides behaves in cardiopathics, outside of the asystolic periods, and to determine the part played by chlorated retention in the first clinical manifestations of cardiac insufficiency. The trial was easy. To know the amount of salt ingested, it suffices to place the patient on a milk diet, (where we know the proportion of salt per litre) and a regimen composed of bread, meat, vegetables without salt (food so prepared does not contain but from 1 gramm to 1 gramm 50. of salt) and to add to this regimen a known quantity of chloride of sodium, say 10 or 15 grammes. By dosaging the urinary chlorides, it is easy to establish the proportion between the ingested and the eliminated chlorides. The daily weighings, made concurrently, show, as demonstrated by Dr. Chauffard, the existence of retention and its variations. In a first series of observa-

tions, Dr. Vaquez grouped patients, in whom the elimination of the chlorides did not provoke any subjective or objective symptoms, and this in as regular a way as in the healthy. In the second series, notwithstanding a state of apparent perfect adaptation, the excess of chlorides ingested brought about the production of organic troubles, frequently at first, transitory, then somewhat more persistent; respiratory difficulty, insomnia, rales of pulmonary œdema, all of them ceasing when the patient was put back to a dechlorated or hypochlorated regimen. The third series comprised two cases, dissimilar as to the nature of the cardiac lesion, but very analogous, however, as to the pathogenic interpretation of the morbid phenomena. The first was a patient suffering from an old mitral lesion, having but shortly commenced to give him trouble in the shape of oppression and dyspnœa, but without provoking as yet true asystolia, though allowing, however, to announce it as impending. The regimen without salt had a suspensive effect, for, during the whole time it was prescribed, the weight remained stationary and the majority of the threatening symptoms disappeared; the patient, notwithstanding continued menaced by asystolia. The test of the chloruration did not delay in appearing. In five days, 52 grammes 50 of salt were taken; 15 grammes 38 were alone eliminated; in this time the weight increased 2 kilos. 900, and the asystolia put in appearance; sense of thoracic constriction, progressive respiratory embarrassment, abundance of rales in the chest, finally malleolar œdema, which appeared for the first time. The salt was then excluded, but it took eleven days for the subjective symptoms to vanish, and twenty-three for the tricuspid valves to become again sufficient.

The second case refers to a man suffering from alcoholic myocarditis. He was a hard drinker, obese, blacksmith by trade, who entered the hospital with all the signs of a strained heart. The trouble had commenced suddenly a year before, after an effort; under the influence of rest the symptoms had greatly improved, but after two months, the dyspnœa reappeared at the slightest fatigue, with œdema of the lower extremities and scanty urine. To sum up, the asystolia became imminently progressive, but the insufficiency was of very recent date. In this observation it was noticed, in the first period of twenty-four days, that under the influence of a regimen without salt and with such dechlorurating drugs as theocine and theobromin, the polychlorurie appeared and persisted during the whole period. Of 36 grammes of chlorides taken, 98.08 were eliminated, so the dechloruration amounted to 62 grammes 08. The weight decreased 8 kilos, 800. All the symptoms present at his entrance: dyspnœa, palpitations, œdema of the lower extremities, disappeared; only the cardiac arrhythmia persisted, but very diminished. During the second period, as his condition became satisfactory, they added to the alimentary regimen, for eight days, the daily dose of 9 grammes of salt. The quantity of urine decreased, the amount of urinary chlorides was very inferior to that of the chlorides ingested. Of 84 grammes absorbed, 46.11 were only eliminated; the retention being then of 37 grammes, 89, involving a hydration of 5 kilos, 800. The functional troubles and the malleolar œdema reappeared, and the arrhythmia became accentuated. At the following period, the salt was excluded from the food. The quantity of urine was increased and the polychlorurie es-

tablished; 21 grammes of chlorides were taken, 86 grammes, 18 eliminated, the dechloruration, in consequence, amounting to 65 grammes, 18, obtained outside of all medicinal action. The weight went down slowly. At the end of this period, which lasted fourteen days, all the morbid phenomena improved, the malleolar oedema was hardly perceptible and the arrhythmia was very attenuated.—*L'Art Medical*.

E. FORNIAS, M. D.

OPERATIVE TREATMENT OF TUMORS OF THE BLADDER.—From literature and his personal experience, Watson has collected and studied 653 cases which have been operated for tumors of the bladder and sums up the results of operative treatment as follows:

If the operative deaths and rapid recurrences are combined under the one head of operative failures, such failures have occurred in 28.6 per cent. of benign tumors, exclusive of myxoma, and in 46.0 per cent. of the cases of carcinoma. Death or rapid recurrence, from three to eight months after operation, has followed in all but two of the cases of sarcoma and myxoma.

He offers the following arguments in favor of radical operation for this condition:

1. The condition, if not removed, is necessarily a fatal one.
2. It is also a suffering one in the later stages, and palliative treatment often fails to relieve this suffering.
3. There are a few patients who have been apparently wholly cured, and a good many more for whom radical operations have secured long intervals of freedom from suffering and symptoms.
4. Because hydro and pyonephrosis are frequently associated with bladder tumor, and because it is possible to avoid these conditions if the operation is done early enough.
5. And, lastly, because of the change from benign to malignant character of the tumors, which is believed to take place in a number of cases.

Against operation are the following reasons:

1. The large proportion of operative failures and the high mortality.
2. The fact that in many cases of benign tumors and in some of the malignant ones as well, medical advice is not sought until a long time after the appearance of the first symptoms.
3. The futility of operating in cases of carcinoma in which metastases are present and the difficulty of determining whether they exist.
4. The hopelessness of operating sarcoma and myxoma.

He believes the factors which favor operation outweigh those which are opposed to it in appropriate cases.

The principal subject of the paper is the proposal that ureteral implantation should be abandoned, and lumbar nephrostomy, with ligation of the ureters done instead and at some time previous to the operation for removal of the tumor, and that total extirpation of the bladder, and the prostate, if it be involved, should be done at the outset in all cases of carcinoma which have not extended beyond the limits of these structures, and in which it is believed there are no metastases, and the same measures shall be applied in all cases of benign growths in which recurrence has taken place after a primary operation for their removal.

Among the advantages to be obtained by nephrostomy are: lessening the time of operation and the liability of renal infection, immediate and efficient drainage of the kidney, and the great advantage is that, at the time of the operation for removal of the growth, the whole question of diverting the urinary secretion and having to deal with the ureters is done away with. Ureteral implantation per se has a considerable mortality, 21 deaths were due directly to the implantation in a series of 114 operations. And many patients die later from ascending infection of the kidneys.

Nephrostomy of one kidney is not so dangerous, but a double nephrostomy upon a human subject has been performed so seldom that there is little data to judge by. When both kidneys have been operated at one sitting, the patients have all had very grave renal and systemic conditions at the time and the results have not been encouraging. But several successful cases have been reported in which the kidneys were nephrostomized at two operations with an interval between. Then there are many cases in which nephropexy on one kidney and exploratory nephrotomy on the other has been performed simultaneously with success.

Although the details would vary greatly in each case, the author offers the following technique: 1. Lumbar nephrostomy, bilateral, or unilateral at first. The ureters should be picked up and ligated at whatever point was the most convenient in each individual case, but preferably as close to the renal pelvis as possible.

2. Total extirpation of the bladder one month or so later.

(a) Abdominal incision in the median line extending upward from the middle of the symphysis pubis and opening the peritoneal cavity.

(b) Place the patient in the Trendelenburg position.

(c) Incise the peritoneum in the middle line over the summit of the bladder from the anterior insertion of the membrane to its posterior one. Strip the peritoneum off of the outer surface of the bladder, ligating the ureters when they are met, and as high up as possible.

(d) When the prostate has been reached, it should be removed together with the seminal vesicles and the bladder, if there is any doubt as to them being involved in the process; if not, they may remain. In the former case, the bladder being drawn up into the wound as far as possible, a double ligature should be passed from behind forward with a long curved needle through the middle line of the urethra at the junction of the membranous and prostatic portions, and each half of the organ should be tied in such a way as to include the blood vessels on either side. A second ligature should then be passed in a similar manner a little anterior to the first one and tied. The tissues are divided between the two ligatures, and the bladder removed.

(e) A better way to accomplish the removal of the bladder would be to approach it from the perineum and from above the symphysis, doing a combined operation, separating the rectum from the prostate in the usual way. Ligating the structures transversely as just described above, then proceeding to complete the removal of the bladder from above the symphysis as already described.

(f) The wounds should be closed in the usual manner, with drainage either through the perineum or abdominal wall or both. Watson submits

this proposal, together with his reasons, only as a suggestion, as he has had no actual experience in the matter, but he believes it will be of decided advantage if skilfully applied.—*Annals of Surgery*, December 1905.

J. D. ELLIOTT, M. D.

NOTE.—It would appear better not to ligate the ureters when doing a nephrostomy, as there would be no exit for the secretions of the mucous membrane when the ureters were again ligated above the bladder.

PERINEPHRITIC ABSCESS.—Ramon Guiteras thoroughly covers the ætiology, diagnosis and treatment of perinephritic abscess in a well illustrated article which is too long to cover thoroughly in a gleanings.

He emphasizes the following conclusions:

1. Many more cases of perinephritic abscess are due to suppurative renal disease than is generally supposed, a fact which will be proved with the rapid strides that are now being made in renal surgery.

2. Traumatism, exposure and similar influences to which primary perinephritis is attributed, are not so important as many observers have claimed. They are often vaguely given as causes, when they are simply coincidences, or the active cause of rupture of already existing abscesses in the kidney or neighboring structures.

3. It is important, though difficult, to determine the source and course of the pus. Therefore, before the operation pus should be looked for in the common urine and the separate urine by the ureteral catheter. During the operation the surgeon should try to determine whether the kidney is the source, and if not, what tissue or organ is. It is equally as important to discover the road taken by the pus, as it indicates where a counter opening should be made, and the further treatment of the case for complications.

4. The elements of success in operations for perinephritic abscess may be summed up as follows:

- (a) Early incision and evacuation before the pus has had time to burrow extensively.

- (b) Thorough exploration, without timidity, opening the kidney and exploring the ureter if need be.

- (c) Thorough drainage down to the deepest part of the sac by means of large, soft rubber drains or gauze, the drain being kept in place until a well formed sinus exists down to the deepest part of the cavity.

- (d) Nephrotomy, nephrostomy, or nephrectomy should be performed if indicated at the time of the operation or later.—*The New York Medical Journal*, January 27, 1906.

J. D. ELLIOTT, M. D.

THE TREATMENT OF TUBERCULOSIS OF THE URINARY SYSTEM BY TUBERCULIN.—In this paper, John G. Pardoe refers more particularly to cases of primary tuberculosis of the bladder or to those in which the bladder condition is the most important feature of the disease.

Treatment by operation or antiseptic washes has been very disappointing, and the author believes often injurious to the patient.

The tuberculin used in his series was Koch's tuberculin rückstand (T. R.) and was prepared in the following manner: Dried cultures of the

bacilli were powdered in a mortar, the powder was mixed with distilled water and the mixture was centrifugalized; the clear fluid thus obtained was called tuberculin oberstand (T. O.). The solid centrifugalate having been dried was mixed with distilled water and again centrifugalized; this process having been repeated several times the fluids obtained from each repetition were mixed together and 20 per cent. of glycerine added to the bulk. Wright and Douglass doubt that this tuberculin (T. R.) is sterile and have shown that it can be heated to 60° C. and 0.25 per cent. of lysol added without injuriously affecting its activity. Pardoe has subjected the solution to this heat for an hour in his recent cases but has not added the lysol.

In the majority of cases very little local effect after an injection was noted, a small amount of swelling and hardness around the puncture sometimes persisting for 48 hours. But in two cases a considerable swelling formed and the whole arm swelled to the finger tips. The swelling subsided in 48 hours, leaving a red, tender spot at the point of inoculation. In one of these cases a depression resulted, resembling a small-pox mark.

In some cases very little change was noted in the tuberculous deposits with small doses of T. R., but when larger doses were used increase of pain on micturition, increased frequency of micturition, and an increase of haematuria and pyuria appeared with general malaise, loss of weight, and sometimes sharp rises of temperature. And the cystoscope showed the discrete tubercles were surrounded by a wider zone of hyperæmia and redness and the bladder capacity was reduced one-half.

All cases of urinary tuberculosis are not suitable for treatment by T. R.; this depends upon the fact that local reaction does undoubtedly occur. A cystoscopic examination should always be made before beginning this treatment to determine that both ureters are not affected. For if they are, any acute swelling of the infected area will cause total blocking and complete suppression of the urine. Death has been caused in this manner.

The T. R. is given hypodermically, and in the initial stages of the treatment the patient should be placed in bed, or at least confined to the house and the temperature and general symptoms carefully noted. The first dose should be 1-500th of a milligramme, and increasing doses should be given every other day until a definite reaction is obtained, usually marked by a rise of temperature of two degrees, some malaise and a slight increase of pain and frequency of micturition. The dose is then decreased to that amount which appears to give no reaction and is continued once a week for long periods. Should a definite reaction again occur, the dose is once more reduced and given at longer intervals.

The clinical evidence is sufficiently delicate to indicate the proper dose as overdosing causes very definite symptoms of loss of ground, both local and general. A cystoscopic examination, made with the greatest care, will show the extent of healing taking place.

The author reports 21 cases, of these five appear to be cured, i. e., they have shown no symptoms of the disease for one year. But on account of the marked tendency to relapse shown by tuberculosis of the urinary system, these are only called apparent cures. Four cases show a very

marked improvement, evidenced by absence of pain and haematuria, diminished frequency of micturition and cystoscopic examinations.

Six cases show no improvement, in several of these the T. R. has not had a fair trial for various reasons.

Six cases died, in one the direct cause of death was the tuberculin.

In concluding the author believes that he is not unduly optimistic in believing that the results gained by injections of T. R. are at least as good as by any other method of treatment. And he also speaks very strongly for an early diagnosis. In not one case where the cystoscope showed diffuse infection has very much benefit been noted.—*The Lancet*, December 16, 1905.

J. D. ELLIOTT, M. D.

AMAUROSIS FROM FILIX MAS.—A man 34 years of age, in fairly good health, had been treated on two previous occasions for ankylostomiasis with filix mas without obtaining any definite result. On this occasion he was given 0.3 gm. of calomel in the evening and 4 gm. of the etherial extract of filix mas on the following morning. As this produced no result, he was given two days later 8 gm. of the same extract. Eleven hours after the second dose he became unconscious. Eight hours later, while wandering about the room in a state of excitement, the nurse thought him totally blind. The state of excitement was followed by one of coma, which lasted several hours and then slowly passed away. The eyes were examined 28 hours after the injection of the drug, and probably 12 hours after the probable onset of the blindness. Both pupils were dilated almost to the maximum and fixed. The fundus of each eye was white with edema, in which only parts of the retinal vessels could be seen here and there. Neither optic nerve nor macula could be seen. In the right eye the visible portions of the arteries were threadlike and the blood columns broken. The visible portions of the veins were very tortuous and filled with very broad, dark red blood columns. In the left eye the edema was less and the arterial blood columns were not broken, otherwise the condition was the same as in the right. Some hours later the retinal edema had somewhat diminished and the arterial blood columns in the right eye had become unbroken. During the following days the edema gradually subsided, the optic disc came indistinctly into view and hemorrhages became visible. A month later both pupils were moderately dilated and did not react to light or convergence. The optic discs were white with indistinct margins, the retinae were sprinkled with white to their peripheries, the foveal could be seen as triangular grayish red spots with indistinct margins, the arteries were visible only here and there as yellowish, white cords, the veins were much diminished in size and sheathed in white and there were numerous hemorrhages in the fundus. Each eye was absolutely blind.—C. Stuelp, M. D., *Archives of Ophthalmol.*

WILLIAM SPENCER, M. D.

SYSTEMATIC EXAMINATION OF THE EYES OF DEFECTERS.—Dr. Lewis uses the word "defecter" broadly, and includes the dull boy in school, to the low grade idiot in the asylum, and the erratic girl, or eccentric man to the pronounced lunatic. He holds that asymmetric development of the ocular

apparatus, and inconformity of the orbital axes and angles are factors of sufficient importance to disturb the physiologic activities of the apparatus in its relation to the higher nervous centres, and give rise to psychologic defection. He therefore insists that every dull or nervous boy or girl in the schools, every case in incipient pulmonary tuberculosis, every candidate for admission to a State hospital, every child summoned before a juvenile court or sentenced to a reformatory, every reasonably intelligent epileptic should have a careful examination of the eyes and means for relief of eyestrain afforded. For continued eyestrain unfavorably modifies nutritive psychic and mental processes; while cures cannot be expected in organic lesions, yet comfort can be afforded, and in the case of young, impressionable subjects with limited mentality, the effects produced may be astonishing and gratifying.—F. P. Lewis, M. D., Buffalo, *Archives of Ophthalmol.*

WILLIAM SPENCER, M. D.

ASTIGMIA AS A CAUSE OF VOMITING OF SCHOOL CHILDREN.—Dr. Aaron Brav reports a number of cases of young school children who for a considerable period of time had had attacks of vomiting during school hours, relieved by removal from school and rest, but returning promptly with the return to work. After proper examination and the wearing of glasses for astigmatism these children, in several months of watching, had no further attacks. He says: "In the absence of kidney conditions, in the absence of gastric pain, of fever, chills, epigastric fulness, all cases of vomiting in school children preceded by vertigo, headache and visual disturbances are in nearly every instance due to astigmatism."—*The Homœopath. Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M. D.

A CASE OF ANOPHTHALMOS.—Soon after the birth of her child it was noticed that the upper lid curled deep into the orbit, with the thickened lower lid overlapping it. The orbital cavity was small and lined with conjunctiva. No trace of an eyeball was detected. The lower lid was swollen and bluish, probably from the formation of a cyst filled with serous fluid and containing retinal elements in its walls, which are usually connected in these cases with the rudimentary eyeball undiscoverable during life. There were no traces in the family history of imperfect development, poor nutrition, or defective vital stamina. There was nothing abnormal about the eyes of the parents. The pregnancy of the mother had been uneventful, except for a fall about the end of the sixth month. Labor had been easy and unassisted. In every other way the child was perfectly formed.—Dr. Charles Graef, *Annals of Ophthalmol.*

WILLIAM SPENCER, M. D.

BORO-GLYCERIN IN ISCHURIA.—As a means of avoiding the frequent use of the catheter particularly after operations, Baisch some time ago proposed to inject 20 ccm. of a 2% boroglycerin solution into the full bladder on the evening of the day of operation, and has reported having almost regularly accomplished spontaneous urination, which continued permanently. For the purpose of testing this method, Pforte (Konigsburg) applied it in a number of cases. In puerperal cases he found it quite satisfactory. In operated cases he had a variable result. The procedure was successful

in 80% of laparotomy cases, in vaginal operations in 38%, and in combined vaginal and abdominal cases only in 20% of the cases. He found, therefore, that this treatment was successful in inverse ratio to the frequency with which ischuria occurs after operation, namely it was successful in only 20% of combined operations, wherein ischuria occurred in 91% of the cases, and was successful in 80% of cases of laparotomy where ischuria occurred in 38% of his cases.

From this it appears that the boroglycerin acts reflexly from the vesical mucus membrane, and that its action is impaired the greater is the disturbance in the reflex nervous circle in consequence of the operation. That this is probably true is sustained by anatomical considerations, as suggested by Winter in the discussion following the paper. He pointed out that the normal mechanism of urination presupposes the intactness of the reflex circle of nerves. The sensory nerves of the bladder leave the latter organ at the trigone and pass on both sides of the cervix through the parametrium to the sympathetic ganglia and the medulla. If during the operation the bladder is loosened from the cervix and from the parametrium, these nerves are mostly torn and consequently the transmission of the sensory irritation to the medulla is disturbed. It is therefore comprehensible that the patient has ischuria and that the medicament is without effect, for it probably only acts by reason of stimulating sensory irritation. Careful examination of cases, especially by cystoscopy has shown this method to be free from danger. Of course the same aseptic precautions are to be observed as in catheterization.—*Monatsschr f. Geb. u. Gyn.* Vol. XXI, 396.

THEODORE J. GRAMM, M. D.

FREQUENT URINATION IN WOMEN.—Among over three thousand gynecological cases treated by Knorr (Berlin) one-fifth had some vesical symptoms, and in one-eighth of the cases there was present an inflammation of the neck of the bladder. Symptomatically there was frequency of urination particularly at night. There may also be present pain and tenesmus during urination, or pain in the region of the bladder, but although pain may be absent the frequent urination usually exists. Pathological changes in the bladder may usually be demonstrated by the cystoscope, and this method of examination has shown that so-called irritable bladder is not nearly so common as was formerly supposed. On examination by the cystoscope, the changes were usually located at the trigonum and at the edge of the sphincter. The triangular red zone was dark red; instead of the fine lines of vessels through which shines the normal mucous membrane, there was a dark redness which also may extend beyond the borders of the trigonum. The epithelium was cloudy, dull, covered with mucus and occasionally with flakes of exudate. The swelling was most pronounced on the margin of the sphincter and transverse folds may exist behind it. In the more severe cases the changes were more pronounced. There were often circumscribed dark red spots looking like petechiae, which were hemorrhages into the mucous membrane. In the acute forms the parts readily bled. The swelling of the mucous membrane may in some cases be so severe as to amount to an œdema. The causes of cystitis are either infection or venous stasis and hyperplasia. The infected cases are caused by

the gonococcus or the bacillus coli or by pyogenic germs. The treatment consists in the application of a one per cent. solution of nitrate of silver to the inflamed places through the endoscope. Irrigation of the bladder with boric acid solution is occasionally used, but does not give the good results of the direct local treatment.—*Zeitschr. f. Geb. u. Gyn.* Vol. LV. 472.

THEODORE J. GRAMM, M. D.

SPONTANEOUS HEALING OF A CASE OF CHORIO-EPITHELIOMA.—Fleischmann reports the case of a thirty-year-old woman who developed chorio-epithelioma with a metastatic vaginal node two years after the delivery of a mole. The vaginal node was excised and the uterus curetted. During the latter operation the uterine wall was accidentally perforated to its serous covering, and on this account the operation was not thoroughly completed. Menstruation appeared after seven months, and subsequently the patient gave birth to twins. On this occasion the placenta was adherent, which gave opportunity for examining the uterine cavity, when nothing of the former disease was found. The author then cites ten authors who have made similar observations and reported their cases.

The question arises as to how the healing of these cases after incomplete operation is to be explained. Some writers assume that the apparently incomplete operation did remove all the diseased tissue; but this explanation is not applicable to a number of the cases cited. The healed cases reported are also ascribed to a benign form of the disease, especially by Velits, who recently described this form as characterized by a diminished vitality of the Langhans cells as shown by sparse or absent mitoses; by a disappearance of the same; by the appearance of migratory cells indicating the disappearance of the syncytium. But even these distinctive features are absent in the carefully studied specimen of one of the authors quoted. Therefore it has recently been suggested that under certain as yet unknown conditions there is formed in the maternal blood a syncytiolysin.—*Monatsschr. f. Geb. u. Gyn.* Vol. XXI, 356.

THEODORE J. GRAMM, M. D.

ONE THOUSAND ABDOMINAL SECTIONS.—Prof. Fenomenoff, at present at St. Petersburg, has published a brief account of one thousand laparotomies performed from 1884 to 1902. All but four were performed in hospital clinics with which he was connected. The series of operations includes 505 ovariectomies, 280 myomectomies, 58 for extra uterine pregnancy, 64 for collections in the tubes, 35 exploratory incisions, 11 ventrofixations, 7 for uterine rupture, 6 Caesarian sections, and 34 for other conditions. His mortality was 77-10% from all causes; but subtracting fatal cases whose exitus was not tracable to the operation or to conditions associated with the operation, the mortality was 51-10%. Some points about his technique are interesting. The aseptic method early replaced the antiseptic, except in some minor details. The silk is boiled in 1 to 1000 bichloride solution. The field of operation is painted with iodine tincture. The hands at present are prepared by long scrubbing with alcohol-soap, washed with alcohol, and the ends of the fingers painted with tincture of iodine. The operating clothing, bandages, &c., are sterilized with steam.

The instruments are boiled in soda water, which being withdrawn from the apparatus, leaves the instruments dry. Mops are used dry. Careful hemostasis is the rule from the beginning of the operation, with separate ligation of bleeding points. Careful covering with peritoneum is also used at all possible points in the pelvis. Drainage is occasionally made by means of a strip of gauze directed into the vagina, and only rarely does he use the Mikulicz drain. The abdominal wound, made usually in the linea alba, is closed in layers, with three or four sutures passing through the abdominal walls, which latter are tied last. The suture material is mainly silk, though other material was used in exceptional instances. Ether is usually given by means of a special apparatus. Morphia muriate is generally given before the anaesthetic, and also the nose cocainized.—*Arch. f. Gyn.* Vol. 74, 633.

THEODORE J. GRAMM, M. D.

GANGRENE AFTER ECLAMPSIA.—Gutbrod (Frankfurt) reports two unusual cases of this condition. A 22 year old primipara had an eclamptic attack at the birth of the head during labor. The second attack occurred while a slight laceration of the perineum was being repaired. In all fifteen convulsions occurred, until the following morning in spite of treatment by chloral and venesection. The patient was then treated by the hot pack for one day, and on the following day it was noticed that on all places where a part of her body had been in contact with another, gangrene had developed. While unconscious the patient had been lying with her left hand under the back and the left foot crossing the right; so that the left hand, the sacral region, inner side of both legs near the knee, the left heel, and the dorsal side of the right foot were gangrenous. Forty-six days later the patient had recovered except at the right foot, and this seemed to be healing; but subsequently amputation of the foot was necessary because of deep inflammation involving the joint.

The second case concerned a 47 year old woman, who was found in convulsions during the night. The child was born on the following morning, but the attacks continued during the day. Pulmonary oedema was well marked when the patient was removed to the hospital, and this condition occupied the attention of the attendants during that night. Toward morning chloral was given. On awakening the patient was affected by mania. On the fifth day the temperature suddenly rose to 105.8° and the left great toe was found to be gangrenous. A corneal ulcer also developed in this patient. In all the woman was sick for four months.

In discussing these cases the author explains their occurrence upon the theory that the eclamptic poison excreted through the skin induced the gangrene; he does not concede that the condition was caused by pressure.—*Monatsschr. f. Geb. U. Gyn.* Vol. XXI, 734.

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY JOHN HUTCHINSON, M. D.

AT THE RECENT celebration in Ann Arbor, Michigan, of Hahnemann's birthday, Prof. W. A. Dewey gave an address on the place of therapeutics in the domain of medicine, from which the following is an extract:

The whole field of possible therapeutic activity may be summed up under three heads: Preventive medicine, palliative medicine, curative medicine. Preventive medicine is the application of any therapeutic measures to prevent the development of the disease. Palliative medicine consists of the use of drugs for their direct effects, the common resources of that part of the medical profession which has no law to guide in the selection of curative means. Curative medicine is the field especially occupied by homœopathy. It is the branch of therapeutics that the non-homœopathic part of the medical profession lacks. The homœopathic physician knows all about preventive medicine, he knows bacteriology, antiseptic, sanitary science and hygiene. The homœopathic physician knows all about palliative medicines. He knows what opium will do, what quinine will do, what all drugs will do when given in any dose. In the curative field of medicine the homœopathic physician exercises his specialty. Here he stands alone. He recognizes that cures are made by nature, by attention to diet, by surgery, by electro-therapeutics. He makes use of all these, and, in addition, he has a law of drug selection to guide him in the most speedy, complete, pleasant cure of disease by medicines. The specialists of the homœopathic schools, our surgeons, our ophthalmologists, our neurologists, are doubly so, because to the knowledge of their particular branches they add a knowledge of homœopathy, in itself a specialty.

All schools make use of palliative and preventive therapeutics, but the homœopathic school adds to this common knowledge that from homœopathic sources unknown to all other schools. Therapeutics is, therefore, the practice of the art of medicine, and homœopathy is a specialty in therapeutics.—*The N. E. Medical Gazette.*

THERAPEUTICS FOR SUPPURATION OF THE ACCESSORY SINUSES OF THE NOSE.
—The old school has practically none. Although our drugs were proved before this trouble was known, any of them have suggestive symptoms and are known to affect the nasal mucous membrane. Clinically, many thus used have been found very useful.

Mezereum will mitigate and often arrest the intolerable burning pain which is present, especially at night.

Spigelia. Swelling in the region of the antrum, with darting and tearing pains, with burning, fœtid, copious discharge.

Mercurius solubilis. Pain is darting and tearing, extending to the ears, worse at night. Head is hot, there is sneezing and a watery discharge.

Phosphorus. Burning and throbbing in region of antrum and a continuous dull, aching pain in the molars.

Kali iodatum and *Mercurius iodatus flavus* are both considered useful in frontal sinusitis.

Aurum is very useful, especially in syphilitic cases. There is a fœtid nasal discharge, with caries of the bones. Boring pains in the bones of the nose at night.

Nitric acid and *Kali iodatum* are also excellent, especially in syphilitic cases.

Arsenicum, *Asafœtida*, *Calcarea carb.*, *Phosphoric acid*, *Hepar sulphur*, *Lycopodium*, and *Silica* are useful when given according to their indications.—*The University Hom. Observer*.

SUGGESTIVE SYMPTOMS.—Fidgety legs—*tarantula Hispaniola*, *zincum metallicum*.

Legs jerk while sitting, but drag on walking—*mygale*.

Fetid ozæna; stitches through the chest—*theridion*.

Perspiration stains the linen yellow—*carbo animalis*.

FELS NAPHTHA, especially with warm water for laundry purposes, seems to have caused rheumatism, tingling and numbness of the hands and arms. In one case, at least, the symptoms disappeared after the use of fels naphtha was abandoned.—*Hom. Eye, Ear and Throat Journal*.

THE *Hom. Eye, Ear and Throat Journal* quotes:—

“Talk health. The dreary, never-ending tale

Of mortal maladies is worn and stale.

You cannot charm, nor interest, nor please,

By harping on that minor chord, disease.

Say you are well, or all is well with you,

And God shall hear your words and make them true.”

This smacks of “Christian Science.” But note how the latter can talk pathology!

BAPTISIA TINCTORIA.—Cases of continued fevers are numerous, in which a typhoid condition constitutes a complication of the gravest nature, and one which will many times promptly yield to small doses of Baptisia.

A case to which I was recently called will, to some extent, illustrate the positive and efficient action of this drug. The temperature was very high, the pulse frequent, and there was diarrhœa, and also a considerable abdominal soreness and pain on pressure. The face had a very dusky appearance. I prescribed as follows: ℞ Specific Baptisia, gr. xx.; water, ℥ iv.; teaspoonful every hour. With the exception of turpentine and sweet oil—one part of the former to three parts of the latter—applied to the abdomen, Baptisia was the only remedy employed, and the patient made a complete recovery in seven days.—*John Wm. Fyfe, M. D., in The Electric Medical Journal*.

THE NAME OF THE Hampden Homœopathic Hospital, at Springfield, Mass., has been changed to the Wesson Memorial Hospital, in honor of its benefactor.—*The Medical Counselor*.

Query: Any change in therapeutics? Is homœopathy left out?

THE *American Physician* says: In view of the great diversity of opinion as to what homœopathy really is, as elicited from personal conversation with brethren in all parts of our glorious land, who claim to be homœopaths, but yet use everything under the sun, it occurs to us to suggest another Committee to the American Institute of Homœopathy; one whose duty it shall be to formulate the true meaning of Homœopathy the same as Health Commissioner Eugene H. Porter defined what constitutes a homœopathic physician. There is much mouthing and beating the air when the Law of Similars is invoked; the scientific meaning of the totality of symptoms seems to include three or four homœopathic medicines in one glass, some headache powders, some antitoxin for diphtheria, vaccination for smallpox, morphine injections for pain, and a few other things not necessary to recount. We all know what they are. So we repeat: Let us have a good definition of homœopathy by our national representative body.

A RESOLUTION.—In view of the fact that homœopathic medicine is therapeutically a series of experiments to determine the effects of various drug substances, whether injurious or not; and,

In view of the fact that homœopathic medicine is therapeutically based upon the provings of each single drug substance upon the healthy organism to determine its specific and exact action in disturbing cellular or functional equilibrium, and that, therefore, any government proving may be made of scientific value in the cure of disease, we, the members of the Homœopathic Medical Society of the County of New York, respectfully recommend, that, in further experiments, a homœopathic preparation of the drug substance be administered to several of the provers, and that the effect, mental and physical, with careful regard to the character, location, aggravation or amelioration (as from heat, cold, pressure) of each symptom be noted in all cases (also in those taking crude doses), that the government commercial provings may be made of therapeutic value to the 15,000 homœopathic practitioners, to the hundreds of thousands of taxpayers under homœopathic treatment, and to exact medical science in general.

Adopted and ordered sent to all our journals, Secretary of Agriculture and Chief Chemist Department of Agriculture.—*The Chirman*.

THE BRITISH HOMŒOPATHIC ASSOCIATION'S annual report (*The Homœopathic World*) refers to the lectures of Prof. E. B. Nash, of the New York Homœopathic College, as being "fully appreciated. The members of the committee are to be congratulated on having secured even for so short a time the services of one of the ablest exponents of homœopathy, reputed in the United States as a teacher and well known in Europe by his writings." The lectures are entitled: "Our Materia Medica," "How to Study Materia Medica," "Comparative Materia Medica," "Antipsories with Comparisons," "New Remedies; How to Study Them."

COLDS.—According to Dr. Similia, of Barcelona, the changes of temperature indicating the approach of winter, are the frequent cause of catarrhal inflammation of the nasal mucosa, an affection more annoying than serious, but which should be attended in time if we do not wish to witness extensions leading to laryngitis, bronchitis, pneumonia, otitis, &c. He advises to lay aside the light clothing of the summer as soon as the fall commences, and substitute them by middle weight apparel, not too heavy, to avoid the promotion of sweating, but heavy enough to protect the system against sudden changes of temperature, and as most colds in the head come from cold or wet feet, good heavy shoes should always be worn.

He is in favor of abundant cold water ablutions in the morning, followed by reaction, obtained by going back to bed for a while or by frictions or massage. Avoid draughts of air, not meaning by that that we should fear the external air, as this air no matter how cold is salutary when protected by good clothing and the heat developed by motion. When cold is extreme, we should keep a moderate temperature in the house, uniformly so in all the rooms, if we wish to avoid coryza. If notwithstanding all precautions we catch cold and this is ushered in with frontal headache, and dryness and tickling in the nose, a few doses of 3 or 4 pellets of *Mercurius Sol.* 6c. will relieve the condition, unless there are febrile manifestations, in which case the preference should be given to *Aconite*, 12c. If caused, however, by getting wet, or by inspiring a damp air, a cure is obtained by *Pulsatilla* 6c. If the trouble advances, with nasal obstruction, especially at night, with dryness of pharynx and nose, swelling, lachrymation, and discharge of bloody mucus, *Ammonium carbonicum* should be prescribed, but, if with the obstruction, there is a profuse discharge of watery, corrosive exudation which produces an erythematous inflammation of the nostrils and upper lip, no remedy can take the place of *Arsenicum album* 12c.

With these remedies, and *Belladonna*, 30c., if there is headache with congestive manifestations; *Euphrasia*, 3c., if the eyes are affected, and there is profuse lachrymation, and *Nux Vomica*, 6c. if there is running from the nose during the day and dryness at night, with headache, general soreness, irritable temper, dryness of the mouth and throat, and constipation, we can meet almost all the forms of the first stage of colds.

A prolonged cold, which runs up to 3 or 4 days, with thick, sticky discharge and loss of smell, is best treated by *Pulsatilla*, 3c., resorting to *Hepar Sulphuris*, 6c. or *Silicea*, 30c., in obstinate cases.

Coryza in the adult has little or no significance, but in the new born or those still at the breast, is a constant source of trouble, as it interferes with sucking and in consequence with nutrition. In such cases the spoon should replace the teat, if you do not wish to see the suckling in distress at least until relieved by a few doses of *Nux Vomica*, 6c., or *Dulcamara*, 3c.

With care, the termination is always favorable, unless we have to deal with a coryza, the symptom of some dyscrasia (scrofulosis, gout, syphilis, herpes), which then tends to become chronic, with inflammatory swelling of the mucosa; or unless we neglect the cold and this extends to the frontal sinus, with severe headache, *Belladonna*, 6c.; to the eyes, which become infected and pour out profusely corrosive tears, *Euphrasia*, 3c.; to the Eustachian tubes, disturbing audition and causing noises in the ear, &c., *Pulsatilla*, 6c.; or to the trachea and larynx invading the chest, *Dulcamara*, 6c.—*Boletín Homœopat Hospital Nino Dios.* E. FORNIAS, M. D.

THE HAHNEMANNIAN MONTHLY.

APRIL, 1906.

THE DIAGNOSIS OF LESIONS IN THE UPPER ABDOMEN.

BY THEODORE L. CHASE, M. D., PHILADELPHIA.

IN considering diseased conditions of the upper abdominal cavity, we must keep in mind the close relationship of the organs situated in this region and the complexity of symptoms arising when one or more lesions develop in this area. The much abused term "dyspepsia" is no longer sufficient to base treatment upon. When for our consideration, patients present the usual variety of symptoms, *i. e.*, eructations of gas from the stomach, indefinite sensations of discomfort in the epigastrium, nausea, vomiting, and pain localized or radiating over the upper abdomen and chest, with tenderness in the epigastric area, we should regard the condition as due to a lesion necessitating more than the usual symptomatic treatment. Such cases require a most careful examination, observing the details of the previous history in order that a correct diagnosis may be followed by the proper treatment.

In ulceration of the stomach, the predominant symptoms are nausea and vomiting—the ejection occurring about two hours after the taking of food. Hyperchlorhydria and hemoptysis when present produce anæmia and cachexia. In cases presenting the last mentioned symptom the danger lies in exhaustion from repeated hemorrhages, or rupture into the abdominal cavity with resultant septic peritonitis. In most instances pain of a variable character is present. It may be described as gnawing or burning and most frequently oc-

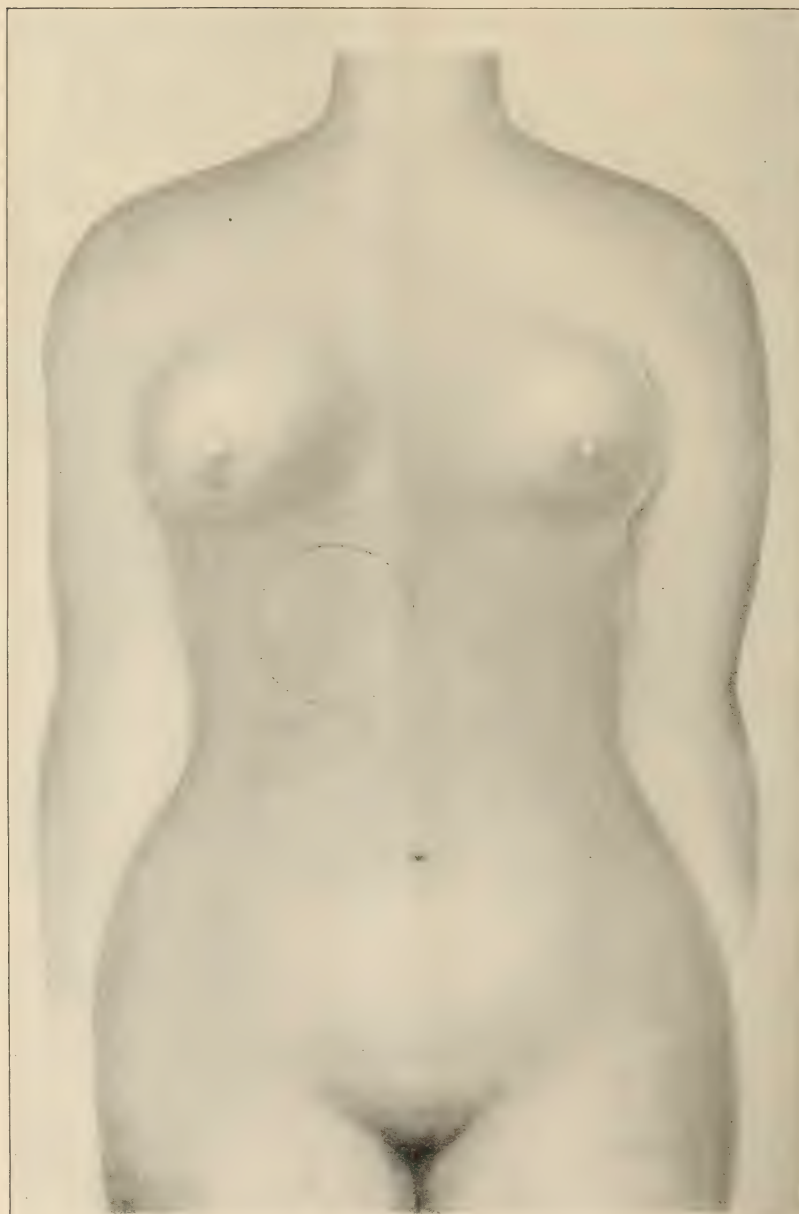


FIG. 1.

Showing area of tenderness most frequently found in lesions of the upper abdomen.

curs as an acute paroxysm of gastralgia. The attacks may begin immediately after eating, or may occur when the stomach is empty. The pain is referred to either the epigastric or dorsal regions covering an area from a mere spot to several inches in diameter. When the dorsal pain is complained of, it is generally to the left of the spine about the ninth dorsal vertebra; although it may be located above or below this point. Tenderness upon pressure is one of the common symptoms.

Pyloric obstruction with dilatation (from atony) is attended by thirst, variable appetite, offensive eructations, and a sense of fulness in the epigastrium with some tenderness. In advanced cases vomiting occurs, the offensive character of which is due to contained yeast fungi, sarcinæ, and numerous bacteria. Hydrochloric acid is secreted in excessive amounts, and finally emaciation and exhaustion result, if relief is not obtained.

Collectively considering all organs of the body, the stomach is found to be the one most frequently affected with cancer; being second only to the uterus in the order of frequency of this disease in females. The stomach is the organ involved in about one-fourth of all cases of carcinoma. The growth occurs at or near the pyloric end of the stomach in 70 per cent. of cases, and presents the form of a cylindrical-celled adeno-carcinoma; the encephaloid or medullary types being followed by the less frequent scirrhus and colloid varieties. In rare cases the most extensive infiltration of this disease, but slightly impairs the process of digestion, a case having been recorded wherein the entire stomach showed infiltration of colloid cancer, and yet at post mortem the organ contained large pieces of undigested meat.

Among the early symptoms of carcinoma of the stomach pain of a lancinating character is noted. The suffering is not intensified by the presence of food. The pain is characterized as dull, gnawing, or burning in character and associated with a sense of weight in the abdomen, while pressure over the affected area may or may not elicit soreness. Exacerbations of pain become intense when ulcerative processes develop, or when inflammatory adhesions form to adjacent organs. Vomiting is usually present, though the location of the growth determines the frequency of this symptom, and as was said of pain in these cases—vomiting is not dependent upon the ingestion of food. It should be remembered that the vomited blood may present

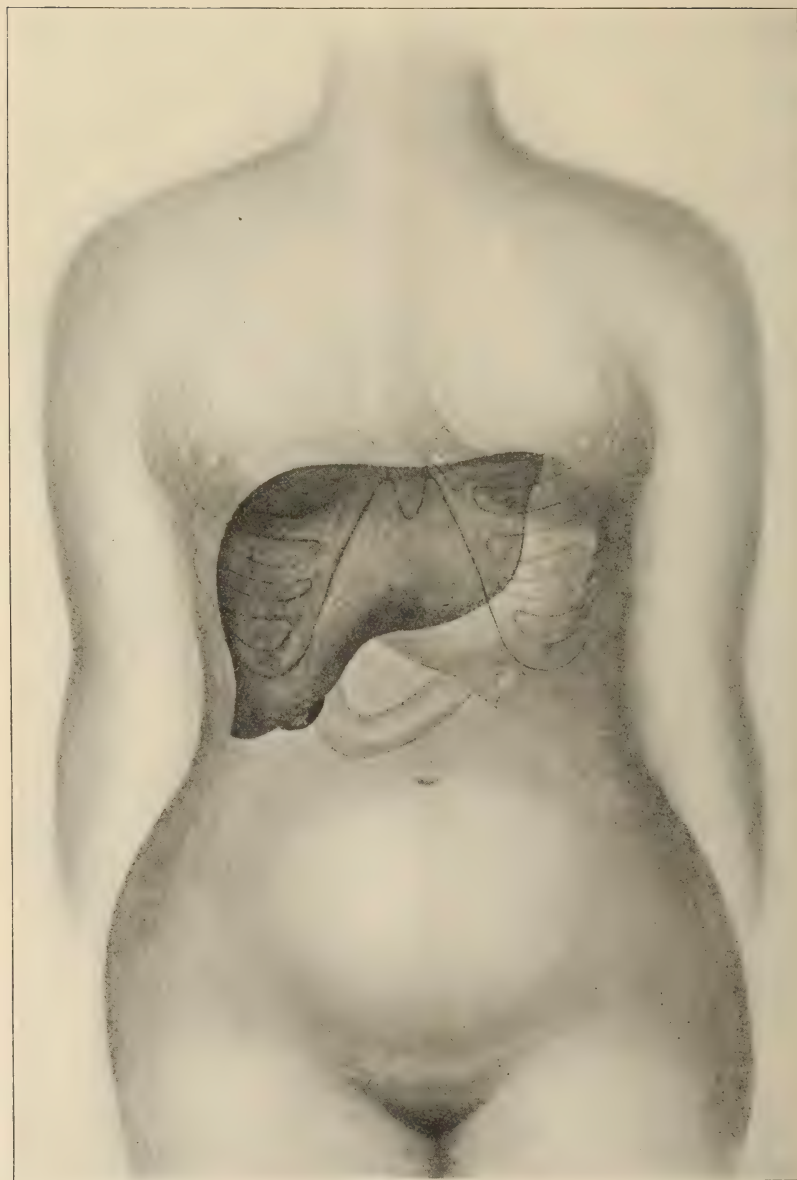


FIG. 2.

Illustrating superficial organs occupying the area of tenderness found in lesions of the upper abdomen. (The right lobe of the liver, gall-bladder and pylorus.)

very slight change, even when it has remained in the stomach several hours. Hemorrhage in these malignant cases is at first slight, the blood being a dark brown or blackish color and mixed with gastric juice, food, and mucus. Rarely the ejected blood is bright red. Fever, a late development of the disease, is invariably a sign of ill omen. Cachexia is also a tardy symptom. The temporary hyper-leucocytosis which is normal during gastric digestion is absent in carcinoma of the stomach.

Upon examination we look for fulness in the epigastric region, peristaltic movement, a diffuse area of aortic pulsation, the characteristic subcutaneous nodules around the umbilicus, and the presence of a tumor. Some or all of these conditions may be discovered during examination. Obscure cases may fail to engage our attention as to the existence of some very important intra-abdominal conditions; for instance we occasionally find cases presenting a variety of gastric symptoms with varying degrees of anemia, and with no evidence of a tumor. We can often differentiate these cases by referring to the previous history, remembering that a long-standing dyspepsia without cachexia, and with an absence of lactic acid in the test meal should be considered as non-malignant until more symptomatic evidence is obtainable. As to the diagnostic value of total acidity, we recognize the fact that an excessive amount indicates ulceration, while a low percentage points to malignancy.

The first portion of the duodenum described as the "vestibule of the small intestine" comprises the area beginning at the pylorus and ending at the papilla marking the opening of the bile and pancreatic ducts, where the alkaline secretion from the pancreas empties. This area is often the seat of ulcer primarily, and secondarily of inflammatory changes arising at the pylorus, or in the gall-bladder. When the duodenum is the organ primarily involved the gastralgia is apt to occur at night and during intervals when the stomach is empty. In ulceration of this organ blood is seldom vomited; but often passed in the stools.

It is stated by noted authorities that "a gall-bladder once infected is always infected." Whether we accept this statement or not, we are positive that an infected gall-bladder is extremely slow to show improvement and in the vast majority of cases the condition grows progressively worse, until as a last

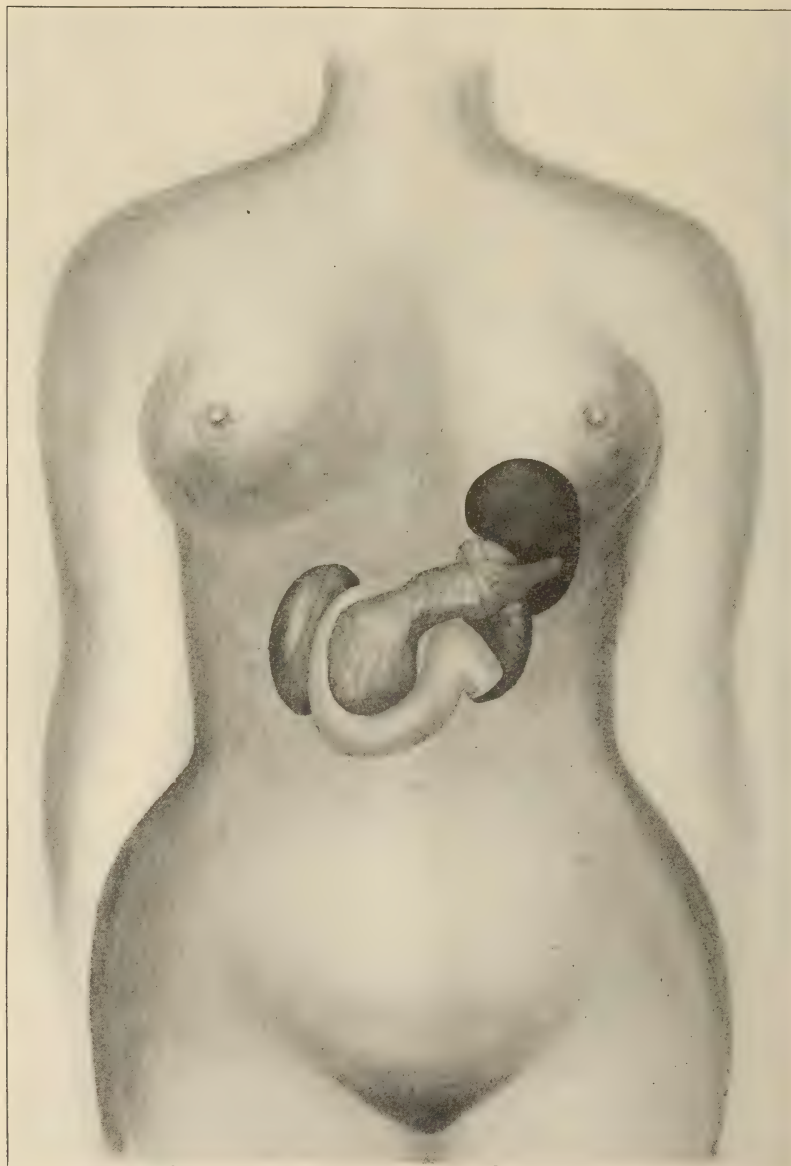


FIG. 3.

Showing the deep area of tenderness in the same region. (Head of the pancreas, duodenum and right kidney.)

resource surgical interference is advised. The inflammation rapidly extends to the serous covering of the organ, producing adhesive peritonitis to the adjacent viscera.

A cholelithiasis may remain dormant for long periods; but during this quiescent stage a progressive thickening of the walls of the gall-bladder takes place; new glands develop, and sooner or later the irritation of the stones brings forth a train of characteristic symptoms. When a stone occludes the cystic duct the gall-bladder becomes acutely distended; thus inducing intra-hepatic biliary apoplexy, with destruction of the parenchyma, or rupture may take place into the peritoneum. In the early stage the liver is swollen and full of bile; should the obstruction remain in situ biliary cirrhosis supervenes. The patient complains of oppression in the epigastrium, flatulency, acid eructations, loss of appetite, a sense of tension in the right hypochondrium, and general weakness. Jaundice of varying intensity follows accompanied by fever. Examination reveals slight enlargement of the hepatic area, due to the biliary stasis.

Upon the administration of remedial and dietetic measures the symptoms subside and the liver becomes reduced in size, but never regains its normal dimensions. The condition is inevitably followed by a grave relapse, icterus becoming permanent; finally a fatal issue ensues. When a gall-bladder becomes infected, one or many chills succeeded by a marked rise in temperature develop and a profuse sweat generally follows.

The indefinite diagnosis of dyspepsia is too frequently made when gall-stones are the prime cause of the indigestion. We are aware that a large percentage of cases of cholelithiasis present no symptoms, owing to the ability of the gall-bladder to sustain great distention without rupture. The passage of a stone through the cystic or common ducts usually excites violent attacks of biliary colic lasting from a few hours to a number of days. Should the stone completely block the common duct, intense jaundice results. Rise in temperature, profuse perspiration, vomiting and extreme tenderness in the epigastrium accompany attacks of biliary colic. The spleen may become enlarged, and in many instances albumin and blood are found in the urine. If the seizure is particularly severe, syncope may ensue. Intermittent hepatic fever occurring in cases of permanent obstruction of the common duct is similar to malarial fever, beginning with a chill followed by an abrupt rise



FIG. 4.
Disclosing portal entry to the liver, portal vein and bile-ducts. (Liver elevated.)

in temperature and ending in a profuse sweat. Many complications may arise, the most important being ileus due to atony of the bowel, the formation of adventitious bands, ulcerative changes due to pressure of a stone, hemorrhage, adhesions, leading to duodenal and pyloric obstruction, various fistulæ, stricture of the bile ducts, abscess formation, empyema, and gangrene of the gall-bladder, suppurative pancreatitis, general septicemia and pyemia.

The history of the previous attacks is an important diagnostic factor. The paroxysmal attacks of pain radiating from the right hypochondrium over the abdomen and transmitted posteriorly to the right scapular region, and accompanied by vomiting and possible collapse with or without the development of jaundice determine the diagnosis.

Since the pancreas is deep seated (retro-peritoneal) and situated high in the upper abdomen, disease of this organ does not present a clearly defined symptomatology. If a hemorrhage occurs within the gland substance the onset of symptoms is sudden; nausea, vomiting, restlessness and collapse often follow in quick succession. The upper abdomen is tender to deep pressure, and the temperature subnormal. Acute pancreatitis is ushered in with violent colicky pain in the epigastrium; chills and fever soon follow, and collapsic symptoms come on in the majority of cases. Pancreatic abscess is recognized by the presence of a deep seated tumor in the lower portion of the epigastrium.

Icterus, fatty diarrhoea and the presence of sugar in the urine are commonly observed. The symptoms arising from chronic diseases of the pancreas, *i. e.*, chronic pancreatitis, cysts, tumors, calculi, etc., are often negative until the enlargement attains sufficient size to direct attention to its presence, or to produce discomfort by pressure. Eventually nausea and vomiting with periodic colicky pains accompany the progressive enlargement of the abdomen.

The treatment of lesions of the upper abdominal cavity covers a wide field of therapeutic measures. In atonic dilatation of the stomach, and certain forms of ulceration, medication and proper diet will afford relief, unless the conditions have been of long standing; or complications arise which retard recovery. These remarks apply equally to duodenal ulceration. When the gall-bladder becomes acutely infected or contains gall-

stones treatment can only be considered from a surgical standpoint. The operation, if performed early has a low mortality rate. (Not over three per cent. of fatalities).

In the treatment of pancreatic lesions surgical interference should be made as soon as the diagnosis is determined. The unfavorable cases are those where operation has been refused; the cases wherein early drainage was made having a majority of recoveries.

In carcinoma or sarcoma involving any of the aforesaid organs, early surgical treatment affords twenty-five per cent. of recoveries.

Upon general principles, when we are called upon to treat patients suffering from lesions involving the upper abdominal cavity, after having carefully considered the previous history, and noted the exact location of the point of maximum tenderness, should the diagnosis warrant medical treatment such may be advised; but when the administration of remedial measures, together with a careful diet and sufficient rest fail to relieve; or if upon resumption of the ordinary routine of living relapse follows apparent improvement, an exploratory incision followed by application of the proper surgical treatment should be advised.

ACTIVE TREATMENT OF MUSCULAR RHEUMATISM.—B. B. Cates states the necessity in muscular rheumatism of quickening the circulation, opening up freely all excretory channels, and eliminating all waste material, is of the highest importance. Nearly all patients with muscular rheumatism have torpid livers, heavily coated, furred tongues, offensive breaths, constipation, frequently headaches, in other words the classic signs of a condition termed biliousness, or more correctly speaking an auto-intoxication. Frequently these rheumatic subjects are heavy eaters, they eat fast, chew their food improperly and complain much of indigestion. Treatment calls for proper muscular exercise preferably on rising, cold tubbing and brisk rubbing. Special attention must be paid to the diet, mastication of food, and the first step to insure this is to see that the teeth are in perfect condition. Special directions are then given as to exercise. He declares that a rigid adherence to the rules he lays down will not only cure the most obstinate case of muscular rheumatism; but will develop the muscles, banish indigestion and constipation, and soon, unless the patient has his daily exercise and cold plunge he will feel uneasy.—*Boston Medical and Surgical Journal*, November 2, 1905.

THE THERAPEUTICS OF CARDIAC DISEASES.

BY G. HARLAN WELLS, M. D., PHILADELPHIA, PA.

(Read before the Wednesday Night Medical Club.)

THE field of cardiac therapeutics is such an extensive one that the writer has confined his remarks in the present paper to a discussion of the therapeutic management of the chronic valvular lesions and of the chronic forms of myocardial degeneration which develop with or without an accompanying valvular lesion.

First, let us consider the general principles which must guide us in the rational treatment of diseases of the heart. Too much emphasis cannot be laid upon the fact that *the condition of the heart muscle is the key both to prognosis and to treatment in cardiac diseases*. That this is true in cases where the myocardium is primarily involved is self evident. In the consideration of valvular diseases the important point to determine, is whether the heart is able to compensate for the valvular lesion and to maintain this compensation. The conclusion which we reach is based on the condition of heart muscle, and whether or not conditions are favorable for the maintenance of its nutrition. Generally speaking, too much importance is attached to the valvular lesion alone. If a heart is able to maintain the circulation under the ordinary demands which are made upon it, the mere existence of a murmur is not sufficient indication for treatment.

There are several factors which will aid us in forming an opinion as to whether we will be able to restore and to maintain the tone of the heart muscle.

First: Conditions relating to the heart itself:—(a) the size of the heart; (b) is hypertrophy or dilatation the predominating feature; (c) the character of the cardiac contractions, whether strong or feeble, regular or irregular; (d) the condition of the peripheral circulation as indicated by coldness of the extremities, etc.; (e) the presence or absence of signs indicating cardiac embarrassment (dyspnoea, pericordial pain, vertigo, etc.) not only during rest but also when an extra demand is made upon the heart; (f) the way the heart responds to cardiac stimulants, as digitalis and strychnia.

Second: The character of the pathological lesion present in the heart:—(a) is it primarily a lesion of the valves or of the

myocardium? (b) is it the result of some temporary or removable cause, or the result of grave degenerative changes? (c) the recognition of the particular valve or valves affected (if the lesion is a valvular one).

Third: The condition of the organism as a whole and especially whether conditions are favorable for the nutrition of the cardiac muscle. This factor is a most important one. In deciding it we should note: (a) the general nutrition of the patient; (b) the age; (c) the condition of the arteries; (d) the condition of the stomach and intestines; (e) the condition of the kidneys; (f) the condition of the lungs; (g) the hereditary tendencies of the patient, particularly in regard to vascular degeneration.

Fourth: The temperament and occupation of the patient. A discontented, worrying disposition is a serious obstacle to recovery in cardiac affections. Many patients tell us they cannot avoid worrying. If such is the case it is their misfortune; the physician cannot alter the facts. An occupation involving mental worry or continued physical strain is decidedly prejudicial to recovery.

For clinical purposes we can divide the treatment of chronic cardiac diseases into two classes: 1. Cases where the heart muscle has undergone such changes as enable it to competently maintain the circulation—commonly known as the stage of compensation. 2. Cases in which the heart is unable to maintain the circulation—commonly known as the stage of broken compensation. The following diagram (See chart on page 253) devised by Martius graphically illustrates the condition of the heart in each of these classes.

THE STAGE OF COMPENSATION.—When a heart which has been affected by some pathological lesion has once regained its power to properly carry on the circulation, every effort must be made to maintain this condition of compensation. *Upon this point the future health and usefulness of the patient depends.*

Our first indication is to *prevent anything likely to strain the damaged heart.* Strains may be external or of internal origin. Of the external strains, patients (especially those suffering from aortic disease or myocardial degeneration) must be warned against hurry, arduous physical exercise, mental excitement, and Turkish baths. The act of

coitus has serious risks especially in aortic insufficiency. The internal strains which we must endeavor to avoid are gout, bronchitis, rheumatic fever and acute indigestion.

Our second indication is to *maintain the nutrition of the heart muscle*. This means that the nutrition of the body as a whole should be kept at its highest level, and necessitates de-

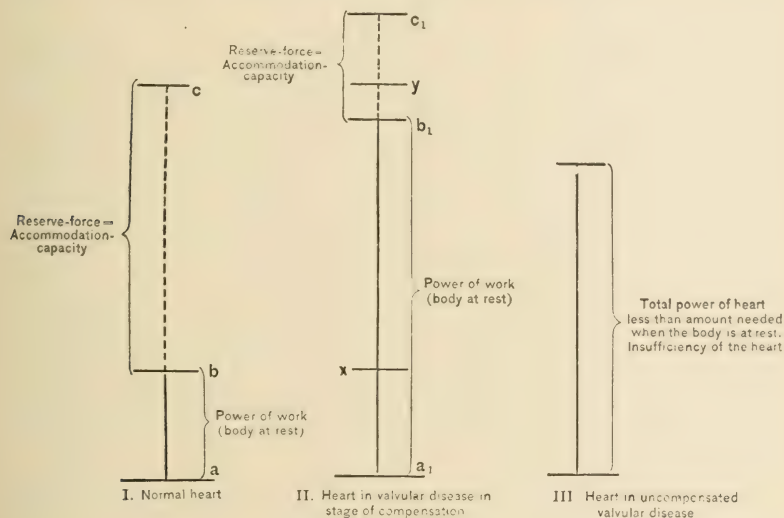


CHART I.

Diagram I represents the normal heart. The line a c equals total power of the heart. Observe that only a small portion of this power (a b) is used with the body at rest.

Diagram II represents the heart in valvular disease in the stage of compensation. Note that the total power of the heart prior to muscular hypertrophy (a₁y) is almost all required with the body at rest. After muscular hypertrophy the total power is increased by the line y c₁, thus adding to reserve force of the heart.

Diagram III represents the heart in the stage of ruptured compensation—the total power of the heart being less than the amount needed with the body at rest.

tailed attention to diet, daily bathing, moderate exercise, plenty of sleep and a quiet, regular mode of living. The amount of liquid taken daily is important. In the absence of distinct indications for increasing the amount of water to be consumed by the patient the total quantity of fluid taken daily should not exceed three pints. The transportation and elimination of large quantities of water is a serious tax on a

damaged heart. Such directions as those mentioned above are so common that the average patient is inclined to receive them as trite and unimportant. But it must be remembered that it is to the degree that we are able to impress upon them their importance, and that they are willing to carry them out, that their future health and longevity depends.

MEDICINAL TREATMENT.—Great harm can be done by the injudicious administration of drugs during the stage of compensation. The use of cardiac stimulants such as digitalis, strophanthus, etc., is not only useless but usually harmful. The remedies which should be thought of in this condition are those having a relation to general nutrition, as the iodide of arsenic (3x), ferrum (2x), ferrum phos. (2x), arsenicum (3x), aurum chlor. (3x), cactus grand. (1x). Of all this group of remedies I regard ferrum, arsenicum, and arsenicum iod. as the most generally useful. Where there is a tendency to fibroid degeneration of the heart and sclerosis of the arteries, the administration of five to ten drops of a saturated solution of sodium iodide three times a day, or ten drops of the third decimal dilution of the chloride of gold three times daily is very valuable.

STAGE OF BROKEN COMPENSATION.—There is no specific drug or no routine method of hygienic treatment which is applicable to all cases of ruptured compensation of the heart. Therapeutic measures must be directed to removing the cause and to meeting the symptoms which arise. If the etiological factor in the case has been excessive mental or physical exertion, anemia, indulgence in alcoholic liquors or tobacco, measures must be taken to remove it. Where pulmonary disease has been the starting point of the trouble—as bronchitis, emphysema, etc.—it should receive proper attention. In instituting treatment where the heart is primarily at fault we must take into consideration whether we have to deal with (a) fatty infiltration, (b) fatty degeneration, (c) chronic myocarditis with fibroid degeneration, (d) senile heart.

The rupture of compensation may be sudden and associated with marked cyanosis, arrhythmia and signs of collapse. Many of these cases are fatal. The treatment of such cases consists in putting the patient at perfect rest, the application of heat to the extremities, and the administration of the rapidly diffusible stimulants, as brandy, ether, camphorated oil, and strychnine.

nia. After the patient has recovered from the collapsic condition the same medicinal treatment should be employed as in ordinary cases of ruptured compensation.

In the vast majority of cases the failure of compensation is more gradual, and is manifested by attacks of nocturnal dyspnoea, shortness of breath on slight exertion, vertigo and frequently œdema.

Let us now consider *seriatim* the various therapeutic measures which may be of value in such cases of ruptured compensation and the rational indications for each.

REST.—The most widely adapted and most useful therapeutic measure in the treatment of ruptured compensation of the heart is bodily rest. Osler says many cases of "disturbed compensation may be completely restored by rest of the body." Simple as it is and important as it is, I feel that I voice the experience of you all when I say that it is one of the most difficult measures to get the patient to carry out for the proper length of time. The most careful study of a case and the most accurate prescribing are of absolutely no avail in many instances unless the patient will consent to remain in bed. Drugs can not be expected to bring about favorable results in such cases unless the patient is willing to put himself under conditions favorable for their action. Rest is indicated in all acute inflammatory diseases of the heart (in such cases rest must be complete and absolute in the recumbent position); in myocardial degeneration of all forms (fatty, fibroid); sub-acute and chronic myocarditis; pulmonary lesions with engorged condition of the right heart; aortic regurgitation with beginning failure of compensation; valvular lesions where there is a decided rupture in compensation; angina; aneurism of the aorta and severe senile degeneration.

DIET.—In chronic cases the diet, generally speaking, should be small in bulk and of high nutritive value. Many modifications are necessary to suit individual cases. Where the patient is anemic and debilitated the red meats, milk, eggs, and vegetables containing organic iron should be advised; in cases associated with gout or chronic nephritis the diet must be more restricted, especially as regards nitrogenous food. A good rule is to give the diet that the patient digests easily. Any diet which causes gastro-intestinal fermentation and distention should be carefully avoided.

The use of alcoholic stimulants must be interdicted except in the very old or feeble. Water should be restricted in quantity and unless there is some special indication for its use the total quantity of fluid taken daily should not exceed three pints. In well developed œdema it is often beneficial to reduce the total daily intake of fluids to thirty-two ounces daily. Von Noorden found that the disadvantage of abundant water drinking in patients with a weak heart must not be sought in an accumulation of water in the cardio-vascular apparatus, but (1) In the forced transportation of large quantities of fluid through the blood stream. (2) In the diffusion of water into the tissues, thus causing swelling, compression of the capillaries and an increased resistance to the blood stream. Where there is a tendency to œdema, sodium chloride should be excluded from the diet or the amount ingested materially reduced.

EXERCISE.—It is frequently a very difficult question to decide the amount and form of exercise that will prove beneficial in a given case of cardiac disease. A safe and practical rule to guide us is that any exercise that causes cardiac pain or marked shortness of breath must be avoided. All exercise should stop short of fatigue. Walking against a strong wind should always be avoided by patients suffering from cardiac disease. Exercise has been found to give beneficial results especially in neurotic affections, fatty infiltration, gouty conditions with no marked degenerative lesions, valvular lesions provided the myocardium is fairly healthy, slight degrees of myocardial degeneration and mild cases of senile heart.

The "Oertel treatment" consists of a series of graduated muscular exercises; the patient being required to walk a certain distance daily up a gentle incline. This distance is gradually increased. At the same time the volume of the blood is diminished by restricting the amount of water. The object of the treatment is to induce hypertrophy of the heart. It has been found valuable in cases of simple cardiac debility, in fatty and gout conditions not associated with atheroma or high arterial pressure, and in valvular diseases of recent origin where compensation has been established.

The Schott and Nauheim bath treatment. This consists of a series of baths and exercises. The Nauheim treatment has

been found useful in valvular diseases where compensation is only feebly maintained, in dilatation from debilitating diseases, and in functional neurotic disturbances. The contra-indications for its employment are valvular diseases associated with decided myocardial degeneration, arterio-sclerosis and fibroid degeneration of the heart, aneurism and angina pectoris.

EXCRETORY FUNCTIONS.—The circulation should be kept as free as possible from the products of tissue metabolism. Many of these substances exert a depressing effect on the organism as a whole and tend to set up degenerative influences in the heart and blood-vessels. On this account the excretory organs must be kept active. The urine should be frequently examined and the quantity passed during the twenty-four hours especially noted. The quantity of urine passed is a great help in determining the good or bad effects of certain drugs, especially digitalis, caffeine and diuretics generally.

Constipation is to be avoided especially in cases with dilated and feeble hearts. This is necessary not only to prevent stasis of the portal circulation but to obviate the necessity of straining at stools which is often attended by considerable prostration.

The skin should be kept active by daily sponge baths followed by brisk rubbing if the patient is not too weak. Under no condition should a cold plunge bath be given to a patient with a weak heart.

CLIMATE.—A mild equable climate is best adapted to patients affected with cardiac diseases. Cold winds and sudden changes of temperature are especially harmful, as these tend to induce bronchial and pulmonary congestion. High altitudes (over three thousand feet) are to be avoided.

VENESECTION.—This is a measure which is not resorted to as a rule except in extreme cases, but which is frequently followed by very satisfactory results when ordinary measures have failed. It is indicated where there are signs of marked venous engorgement with orthopnoea and cyanosis. The pulse is small and weak, the extremities are blue and cold. Under these conditions the removal of from ten to twenty ounces of blood may reduce the over-distention of the right side of the heart and enable it to force the blood through the lungs.

MENTAL THERAPEUTICS.—The mental condition exerts a great influence in all cases of heart disease. The physician should encourage the patient and exert every effort to cul-

tivate in him a hopeful mental state. In neurotic and functional diseases of the heart, mental suggestion alone is often sufficient to overcome the morbid condition. In organic diseases also an optimistic attitude on the part of the medical attendant will be a great help in securing the co-operation of the patient and in relieving him of many of the nervous symptoms which often accompany the organic ones.

MEDICINAL TREATMENT.—In the selection of drugs in the treatment of cardiac diseases we must decide first whether we desire to obtain the physiological or the dynamic effect of the drug. If it is decided that the physiological action is needed we must give the drug in doses large enough to produce this effect. If we desire the dynamic effects we should administer it in such potencies as the conditions of the case or our experience dictates. The mistake which is frequently made is to attempt to straddle the fence and give a dose somewhere in between.

Digitalis.—No single drug surpasses digitalis in its usefulness in treating cardiac diseases and yet it is a remedy which is more frequently abused than any other in the treatment of such diseases, because of the fact that it is capable of producing very disastrous results unless carefully and discriminately used.

In moderate doses digitalis strengthens the ventricular systole, lengthens the diastole, slows the pulse and raises the blood pressure. The invigoration of the systole is due to the action on the cardiac ganglia and the muscular fibres of the heart; the slow pulse is due to the stimulation of the pneumogastric nerves; the rise of blood pressure is the result of the increased pulse-volume and the contraction of the muscular coats of the arteries and capillaries. It probably has no direct effect on a normal kidney, its diuretic action in cardiac dropsy being due to the rise of blood pressure and to the removal of the venous congestion.

Digitalis is indicated in many forms of heart diseases associated with *failing compensation and dilatation*. Its most beneficial effects are seen in cases of cardiac dilatation associated with mitral disease, with small, irregular pulse, dyspnoea, and dropsy. Its effects are also useful in aortic disease but the drug must be given cautiously in aortic regurgitation. In many forms of myocardial weakness and mild forms of de-

generation, digitalis is a very efficient remedy. It acts not only as a stimulant to the heart, but by raising the blood pressure and increasing the flow of blood in the coronary arteries it aids in the nutrition of the heart muscle and thus assists in the production and maintenance of compensatory hypertrophy. Digitalis is contraindicated in simple hypertrophy, in advanced cases of fatty degeneration, aneurism and in conditions associated with high arterial tension. Where there is much sclerosis of the arteries the drug must be watched carefully and if it raises the arterial tension too high one of the vaso-dilators, such as glonoine, should be given with it.

The so-called cumulative effect of digitalis is due to the long-continued administration of the drug in large doses or to its non-elimination by the kidneys. As digitalis is very slowly eliminated by the kidneys, as soon as the full effects of the drug have been established the dose should be decreased. Its deleterious effects can be avoided by watching the pulse and the amount of urine excreted. If the pulse becomes markedly irregular and the excretion of urine suddenly diminishes, the drug should be stopped.

The form in which digitalis is given is important. In cases of failing heart and feeble pulse the tincture and the fluid extract are to be preferred. Where diuretic effects are desired the infusion should be used. Many preparations of digitalis are very inefficient in their action. This is due to the varying proportions of the active principles in the crude drug. In cases where the drug seems well indicated we should never give it up as useless until we have used a preparation which has been shown to be active by physiological tests.

When administered according to the homœopathic method, digitalis has been found curative in many chronic forms of cardiac disease, in cardiac dropsy, pericarditis with effusion, aneurism and myocardial degenerations. Farrington recommends it highly in certain forms of cardiac dropsy. A symptom which is almost invariably present when digitalis is indicated is *irregularity of pulse*. Associated with this are dyspnoea, pulse feeble and intermittent or extremely slow, and a feeling of great anxiety and oppression. The cardiac symptoms are at once aggravated by motion.

Strophanthus.—This remedy has the same general effect on

the heart as digitalis, except that it does not contract the walls of the arteries and causes but slight rise of the blood pressure. It acts more rapidly than digitalis, but its effects do not last so long.

Therapeutically, strophanthus is used in many forms of heart disease to supplant digitalis. Most clinicians agree that it is less effective than digitalis in the majority of cases. It is especially indicated in cases where digitalis is not well borne by the stomach, in failing compensation associated with arterial sclerosis and increased arterial tension, and in cases of pulmonary œdema with irregular heart. The writer has many times seen excellent results follow the exhibition of this remedy in cardiac dilatation after digitalis, though seemingly well indicated, had failed. When given in full doses it may produce diarrhoea.

Caffeine.—This remedy, in my experience, ranks next to digitalis in importance as a cardiac tonic. Its effects are more rapid but of shorter duration. Caffeine slows the heart and raises the blood pressure. Its diuretic action is very marked, due to the dilatation of the renal vessels and to its stimulating effect on the renal epithelium.

Caffeine is indicated as a general cardiac stimulant and tonic, but finds its greatest field of usefulness in dropsy accompanying heart diseases. In such conditions it is the most reliable diuretic we possess. Caffeine should be discontinued if its use is attended with decided insomnia or if a delirious condition develops during its administration.

The so-called "citrate of caffeine" is simply a mixture of caffeine and citric acid, and is not as reliable in its action as the pure alkaloid. The dose of the alkaloid is from one to five grains every three hours, by mouth, the maximum dose in twenty-four hours not to exceed thirty grains. If given hypodermically it should be combined with a small quantity of sodium salicylate to make it more soluble.

Strychnia.—This drug is a powerful stimulant to the heart muscle and its ganglia, and to the vasomotor centre, thus increasing the force of the cardiac contraction and raising the arterial pressure.

Strychnia is particularly indicated in acute dilatation of the heart, and in sudden attacks of cardiac weakness resulting from shock or surgical operations. In the crises of acute dis-

eases also, it is our mainstay to support the heart and maintain the patient's strength. It is wise not to continue its administration in large doses for more than a few days, as the constant stimulation may exhaust the heart. On account of its general tonic effect strychnia given in moderate doses is a valuable remedy in many forms of myocardial weakness associated with general malnutrition and depressed nervous conditions.

Nux vomica is a remedy of frequent value in various cardiac disorders. Where this drug is indicated we invariably have evidences of gastro-intestinal disturbance associated with the cardiac symptoms. Thus Cowperthwaite speaks of its value in palpitation, angina and attacks of precordial oppression coming on after eating or after the use of coffee. If this condition is the result of the indulgence in alcoholic liquors or tobacco, nux is till more likely to prove valuable. In the class of patients met with in a dispensary practice the beneficial effects of nux have been repeatedly verified.

Cactus grandiflorus.—This drug acts as a stimulant to the heart muscle and raises the arterial pressure. The general indications for the drug are the same as those for digitalis, but its action is by no means as pronounced. It has been found of value in palpitation and in mild forms of cardiac weakness, when associated with valvular disease or when resulting from protracted illness.

In small doses this remedy has been proven of value in the treatment of functional disorders of the heart, cardiac asthma, and angina pectoris where there is present a sensation of an iron band around the heart constricting its normal movements.

Crataegus oxyacantha.—In mild forms of failing compensation this drug is often useful. Its chief indications are slight dilatation, with weak, rapid pulse which may be irregular. While I have seen favorable results follow the exhibition of this drug in mild cases it cannot be relied upon in grave forms of cardiac dilatation.

Glonoin.—This drug belongs to the class of vaso-dilators and causes a lowering of the blood pressure by depressing the vaso-motor centres and relaxing the muscular coats of the blood vessels. The duration of these effects is short so that the remedy must be given every three or four hours to maintain its action. An immunity to its action develops after the drug has been taken a short time.

Glonoin is indicated in numerous cardiac disorders associated with high arterial tension and spasmodic contraction, and in those degenerative changes associated with old age. It is of great utility in the treatment of cardiac asthma and in cases of impending uremia with suppression of the urine, where the arterial tension is high. In such cases the quantity of urine passed after the administration of this remedy is sometimes enormous. In angina pectoris glonoin is an important remedy to relieve the immediate symptoms of the attack. Homœopathically the drug has been used extensively in the treatment of angina pectoris. The symptoms which indicate its use are, violent pain around the heart, associated with violent fluttering and shooting pains down the arms. The pulse is accelerated and distinct pulsations are felt all over the body.

Amyl nitrate.—The action of this drug is similar to that of glonoin, except that it is more rapid and less durable in its effects. Its most important use is in the treatment of paroxysms of angina pectoris. Three to five drops of this remedy given by inhalation will usually promptly relieve the urgent symptoms of this dangerous malady.

Morphine.—Though morphine has not a very prominent effect directly upon the heart, it is an indispensable remedy in severe cases of cardiac weakness associated with the distressing dyspnœa and insomnia which so often accompanies extreme degrees of cardiac dilatation. When used in these conditions morphine seems to give the patient the power to breathe, and by inducing sleep it will frequently give the exhausted body an opportunity to recuperate its energies, and thus indirectly exercises a distinct tonic effect on the heart itself. The first dose should be small and given hypodermically. It is contraindicated in fatty degeneration and where an advanced renal lesion exists. The best results from its use are obtained in mitral disease.

Arsenic.—The value of this remedy is dependent upon its power to profoundly modify cellular nutrition. It is a most important remedy in organic heart disease where we wish to improve the nutrition of the heart muscle. It is therefore indicated in many forms of myocardial degeneration, angina, in cardiac weakness dependent upon malnutrition, and in valvular lesions with slight rupture of compensation. It is also useful in maintaining the tone of the heart after the urgent

symptoms of dilatation have been relieved by the more powerful cardiac stimulants.

The form of the drug which I have found most effective in promoting the nutrition of the cardiac muscle is the iodide of arsenic. The method of preparing this remedy has much to do with its efficiency. Both arsenic and iodine are volatile and the iodides are quickly decomposed by light. In making triturations of this drug, therefore, the trituration should be carried out as quickly as possible in a dark room, and put at once in capsules. These capsules should be kept in a black or amber-colored bottle. The best results are obtained by the administration of one grain of the second or third decimal trituration three or four times daily. The drug should not be given on an empty stomach.

The arsenicum album has been more thoroughly proven from a homœopathic standpoint, and the indications for its use in minute doses are more clearly defined than are those of the iodide. Its beneficial results are seen in all varieties of functional and organic heart disease which are associated with marked prostration and conditions of lowered vitality. In addition to weakness there is great anxiety of the mind, violent palpitation of the heart, irregularity of the pulse, and often œdema, dyspnoea, and anginal pain. In the cardiac failure accompanying adynamic fevers and organic diseases of the kidneys, arsenic is strongly indicated.

Potassium and sodium iodide.—The iodides are the most valuable remedies we possess in preventing the fibroid and sclerotic changes associated with gouty, syphilitic and senile conditions. Their beneficial effects are shown in angina, chronic myocarditis, and arterio-sclerosis. Where large doses are needed the sodium iodide is to be preferred on account of the deleterious action of potassium on the heart muscle. The best results are obtained from administration of small doses over a long period of time—five to ten drops of a saturated solution well diluted in water, three times a day.

Iron.—Though limited in its field of usefulness, iron is the remedy *par excellence* in those forms of cardiac weakness and fatty infiltration associated with the chlorotic type of anemia. I have observed the best results from the use of Blaud's mass, three grains three times daily. The so-called organic preparations, which are so popular to-day are not as efficient

as the older preparations of iron, but may be used where the stomach is very irritable.

In infinitesimal doses iron is indicated in cases of unstable circulation with flushes of the face, throbbing of the vessels of the head, and rapid pulse.

Cimicifuga.—This remedy is often of service in functional and organic heart diseases associated with nervous and rheumatic conditions. The indications for its use are irritability of the pulse, pain in the left mammary region, frontal headache and, in women, uterine or ovarian disturbances.

Spigelia.—Clinically this remedy is a very effective one in relieving the sharp, shooting pains around the heart and in the walls of the chest, which occur in association with endocarditis, pericarditis or nervous palpitation. The pains of spigelia are usually of the neuralgic type and are associated with palpitation of the heart and intermittent pulse.

Gelsemium.—This remedy is a useful one in neurotic and functional diseases of the heart, especially those brought on by depressing emotions or by the excessive use of tobacco. The symptoms are those of palpitation, a feeling of oppression associated with mental apathy and general weakness.

THE HEADACHE OF BELLADONNA AS DEVELOPED IN THE TEST DRUG-PROVING OF THE O. O. AND L. SOCIETY.

BY HOWARD P. BELLOWS, M. D., BOSTON, MASS.

UPON reviewing the records of the fifty-three provers who participated in the above proving, one of the most prominent effects of the drug, as would be anticipated, was found to be headache. This occurred in various forms and was mentioned in the entries of two hundred and sixty-two different days—although a frontal headache predominated and was recorded by thirty-one of the provers upon one hundred and thirty-three days. How to condense all this material pertaining to headache, with all its accompaniments and modalities, was no small problem in itself. After various experiments the arrangement by types, as herewith submitted, was found to be the most feasible. The daily record of each prover presents the headache which he experienced in a far more interesting setting than this, but it would greatly exceed the limits of a magazine ar-

ticle to enter thus into detail. That will be found in the book which constitutes the final and complete record of the proving in all its phases. This is an advance presentation of the results of the proving as pertaining to the headache developed, condensed, in schematic form, into the smallest possible compass. The double numbers affixed to types or symptoms denote, first, the number of provers who experienced the type or symptom given and, second, the number of days on which it was recorded.

Headache.—Types: frontal (f) ³¹⁻¹³³; headache, without specification (h), ¹⁵⁻⁴⁶; general (g), ⁹⁻²⁰; vertical (v), ¹⁰⁻¹⁶; occipital (o), ⁷⁻¹⁷; parietal (p), ⁶⁻⁹; supra-orbital (s-o), ⁴⁻⁷; temporal (t), ⁴⁻⁶; temporo-frontal (t-f), ¹⁻⁴; temporo-parietal (t-p), ¹⁻²; temporo-sphenoidal (t-s), ¹⁻².

Sides.—Right, ¹⁸⁻⁷²; (f, ⁸⁻⁵⁷; h, ⁴⁻⁶; g, ¹⁻¹; v, ¹⁻¹; p, ²⁻³; s-o, ¹⁻²; t-p, ¹⁻²).

Left, ⁶⁻¹³ (f, ²⁻⁶; p, ¹⁻¹; t, ¹⁻¹; t-f, ¹⁻⁴; t-s, ¹⁻¹).

Direction.—Extending: from r. supra-orbital region to eyes; from forehead to back of eyes; from forehead to back of ears, ¹⁻²; in forehead to margin of hair; from forehead farther back than before; from forehead around head; from forehead to occiput, ³⁻⁸; from both ears to vertex; through from l. to r. temple, ¹⁻²; through temples to forehead; from occiput to frontal region, ¹⁻⁴; from occiput over vertex to frontal region, ¹⁻⁴; from occiput to temples; from occiput through to root of nose, between eyes, ¹⁻².

Intensity.—Slight, ¹⁰⁻¹¹ (f, ⁵⁻⁵; h, ³⁻³; s, ¹⁻²; o, ¹⁻¹).

Severe, ¹⁰⁻¹⁷ (f, ⁴⁻⁵; h, ⁴⁻¹⁰; g, ¹⁻¹; v, ¹⁻¹).

Duration.—Temporary, (f, ²⁻²); for $\frac{1}{2}$ hr. (g); about an hour (f, h ²⁻², g); lasting 2 hrs. (f, ¹⁻², t-s); lasting much of the day (f, v); lasting until bedtime (f); lasting all day (f ²⁻³, h ¹⁻⁹, v ¹⁻²); all day and evening (f); from 11 A. M. until after dinner, at 6 P. M., (g); from 1 P. M. through day (p); from 3 P. M. until retiring at 10 P. M. (h).

[Recurred day after day with many provers, in one instance a frontal headache lasting continuously for 16 days—the average recurrence of headache for each prover being about 5 days.]

Character.—Dull, ³⁴⁻⁷⁶ (f, ¹²⁻³⁵; h, ⁸⁻¹³; v, ⁴⁻⁸; p, ³⁻⁵; g, ²⁻⁴; t, ²⁻⁴; o, ¹⁻⁴; s-o, ¹⁻²; t-s, ¹⁻¹). Sharp, ⁴⁻⁷ (t-f, ¹⁻⁴; f; o; s-o).

Continuous, ⁴⁻¹¹ (f ²⁻⁹; o; v). Throbbing, ⁴⁻⁴ (h, ³⁻³;

f). Bursting, ³⁻³ (o; p; h). Heavy, (h, ²⁻⁴). Splitting, ²⁻² (s-o; g). Boring as if pressed in by the knuckles (t-f, ¹⁻⁴). Tearing (p). Twisting (p). Of congested nature (h). Dreadful (h). Indescribable (h). "As if it had been knocked" (t). "As if pressed with something hard" (t-p). As though sleeping too soundly (g). Which comes and goes (g, ¹⁻²). Coming and disappearing quickly (h, ²⁻²). Coming on in waves (f).

Time.—Toward morning (h). On waking, ⁵⁻⁸ (h, ³⁻⁵; f, ¹⁻²; g). Continuing on waking (f). On rising (f). In morning (f). In forenoon (h). 11 A. M. (f, ¹⁻²). 1 P. M. (p). 2 P. M. (f, ¹⁻⁴). 3 P. M. (h). 4 P. M. (h). 5 P. M. (f; g). 6.30 P. M. (o, ¹⁻²; t, ¹⁻²). In P. M. (f). Increased up to 7 P. M. (h). 8 P. M. (p). Returning at 8 P. M. (g). In evening, ²⁻³ (f, ¹⁻²; g). Disappearing gradually at bedtime (g). On retiring (f). During night (f; h). All night (h).

Appearance.—Appearing: 45 min. after 30 d. tinct. and disappearing after about 3 hrs. (f); $\frac{1}{2}$ hr. after taking drug (f); after straining at stool (h); after doing some housework (h); after breakfast (h).

Cause: violent coughing (p); walking (f); trying to study (h).

Sensations.—Full feeling, ³⁻⁴ (h, ²⁻²; p, ¹⁻²). Feeling of tension, ³⁻³ (p; f; t). Fulness in whole head, worse in occiput (f). Head hot (f). Head heavy (f). S. as if head were too heavy for neck (h, ¹⁻²). S. as of something within head pushing outwards (f). S. as if top of head were lifting up (g). S. as if whole top of head were coming off (g).

Accompaniments.—Preceded by fulness in throat.

Accompanied by: flushed face, ³⁻⁴ (f, ²⁻³, h); temples sensitive to touch (t); heavy feeling, just in front of vertex (h); dread of jar (h); pain over r. eye (f); pain back of eyeballs (f); aching in eyeballs (f, ¹⁻⁷); aching through eyes ²⁻² (o; p); vertigo (h); backache (h, ¹⁻³).

Aggravations.—By motion, ⁵⁻⁵ (v, ²⁻²; f; h; g); by sudden motion (v); while moving (s-o); when stooping (h); from jar (h); from noise, ²⁻² (f; v); from light (f); after eating (f); from smoking (h); in house (f); in warm room (f); on lying down (f, ¹⁻²); when lying down, but unable to sit up (h); on first lying down, until getting quiet (t-p); during

day (f); in P. M. (t-f, ¹⁻³); in P. M. and evening (f); toward evening, ³⁻³ (o; v; f); in evening (f).

Ameliorations.—By going out-of-doors into open air, ⁷⁻⁸ (f, ³⁻⁴; g, ³⁻³; h); by cold air, ²⁻² (g, f); in cold room (f); by resting (f); by keeping quiet (f); by nap at 3 P. M. (f); by lying down in dark room (f); by keeping eyes closed, ³⁻⁵ (t, ¹⁻²; o, ¹⁻²; f); after rising (f); with hat on (g); by pressure ³⁻³ (f, ²⁻²; t); by bending head backward, ²⁻⁴; (o, ¹⁻²; t, ¹⁻²); after eating, ²⁻² (f, v); after supper (g); by menstrual flow (h); by bleeding from nose (f).

Miscellaneous.—Headache focuses in r. eye as if it were going to burst open with pain. At beginning of proving, pain worse in frontal region, but at end of proving it became worse in occiput.

Of the individual provings space permits the citation of one only, in any detail, in this article. In the proving of Mr. I. W. K., of Philadelphia, we find the following entries:

May 31.—3 P. M., for 20 m. sharp, localized, oppressive pain in l. temple, boring as if pressed in with the knuckles.

June 4.—10 A. M., for 15 m. repetition of oppressive headache in l. temporo-frontal region.

June 5.—3.45 P. M. boring pain as before in l. temporo-frontal region.

June 6.—Afternoon, headache as yesterday.

The examiner, in the department of the Mind and Nervous System, appends to this proving the following observation: "The peculiar boring headache in the l. temporo-frontal region, as if pressed in with the knuckles, . . . may in this prover have decided significance as it was characteristic, never having at any time previously existed and always occurring in same portion of the head and with same character of pain."

We find pressive pains very frequent in connection with headache in the older provings of Belladonna, but in neither the older nor the present provings do we find a symptom precisely similar to the above. It reminds us very strongly, however, and may be considered corroborative, of the old symptom of Hahnemann—"Headache as if a stone were pressing the forehead."

To recapitulate and still further summarize in general terms, we find the headache of belladonna, as developed in this test proving, to be chiefly frontal ³¹⁻¹³³, without specification

¹⁵⁻⁴⁶, general ⁹⁻²⁰, vertical ¹⁰⁻¹⁶, occipital ⁷⁻¹⁷, parietal ⁶⁻⁹, supra-orbital ⁴⁻⁷, or temporal ⁴⁻⁶, worse on the right side ¹⁸⁻⁷² (left ⁶⁻¹³), extending from before backwards, ⁴⁻¹² or from back forwards ⁴⁻¹¹, either slight ¹⁰⁻¹¹ or severe ¹⁰⁻¹⁷ in intensity and dull ³⁴⁻⁷⁶, continuous ⁴⁻¹¹, sharp ⁴⁻⁷, throbbing ⁴⁻⁴, or bursting ³⁻³ in character and occurring oftenest in the afternoon ⁹⁻¹⁴, on waking ⁵⁻⁸ or in the evening ³⁻⁵, with feeling of fulness ⁴⁻⁵, or tension ³⁻³ and accompanied by flushed face ³⁻⁴ or pains and aching in or about the eyes ⁵⁻¹¹. Aggravation was chiefly by motion of various kinds ⁸⁻⁸, on lying down ³⁻⁴, and in afternoon or towards evening ⁵⁻⁷, and amelioration by open air ⁷⁻⁸, by cold air ³⁻³, by resting ³⁻³, by keeping eyes closed, ³⁻⁵, by pressure ³⁻³ and after eating ³⁻³.

It will thus be seen that our re-proving of belladonna, although it may not have developed any strikingly new forms of headache, has by its thoroughness and precision given a definite value to familiar symptoms which they never before possessed. It is to be regretted that such a relatively small number of provers noted the conditions and modalities which accompanied their headaches, but it is felt that should this plan of proving ever be followed in a properly equipped Institute this fault would no longer exist and the results would be still more conclusive in detail than those herewith presented.

FERRUM PHOSPHORICUM—A PROVING AND A VERIFICATION.

BY JOHN HUTCHINSON, M. D., NEW YORK CITY.

MANY of our remedies lack complete proving. It is unfortunate, because such proving would inspire our fullest confidence in their sphere of utility. Some remedies are indispensable in a field all too narrow, although well known. Others cannot be counted upon, in the absence of provings, without clinical verifications, which latter lead sometimes to loose and unscientific practice.

Not one of the noble polychrests is over-proved, if I may use the expression. Yet when will those magnificent provings made by Hahnemann and his worthy associates and followers be approached in respect to their excellence and accuracy? The exact knowledge demonstrated thereby is far away above and beyond price to any physician who is prepared to make use of

it. Who can estimate the value to the world of those giant forces so potent in calcarea, lycopodium, lachesis?

Notwithstanding the fact that drug-proving is sufficiently well understood, there is diversity of opinion as to the way in which provings should be made. We have among us the practitioner who can see only pathology, or the results and products of pathology, to whom the subjective physical state is foolishness. We have men who seem not to believe that any medicine above the twelfth potency will ever cure sickness, much less produce symptoms in any prover. On the other hand, there are some minds that do not hesitate to grasp the truth that our most deeply acting remedies contain in their invaluable provings very many symptoms and conditions produced by the 30th, the 200th, and other potencies.

The following fragmentary proving of the phosphate of iron, ferrum phosphoricum (ferroso-ferric phosphate, or ferro phosphas) presents and emphasizes certain phases of the remedy which are significant.

The 30th potency (centesimal) B. & T., was selected for proving. The prover received no information as to the name of the selection. He presented himself in perfect health and strength (all secretions and excretions being normal) and was given one dram of medicated pellets, a dose to be taken every two hours. This was on a Saturday evening, in November, 1903. Two doses were taken before bedtime. The next day the record began:

General discomfort, as from fever.

An unsatisfactory mental state, evidenced by inability to command the right words to express myself in conversation.

Words seem to come slowly, and do not seem the right ones.

Head begins to feel thick, queer, inflamed, congested.

Have I taken a bad cold all at once?

Mucous membrane of mouth, throat, nose, antra feels sore—catarrhal.

Bowels free, relaxed. Three movements Sunday.

No thirst; drink less water than usual.

Naso-pharynx growing very sore.

Monday morning, much thick mucous in naso-pharynx, dislodged.

Throat sore left side, and Eustachian.

Also pain extending from within to L. Ext. Aud. Meatus.

Soreness of throat shifting spasmodically from left to right.

Discontinued medicine Monday forenoon (after 12 doses).

All the foregoing symptoms increasing.

All the head spaces sore, congested, suggests impending ulceration.

Stomatitis, dental sordes, pain in hard palate, tickling tongue.

Shooting pain from Eustachian through ear, now r., now l., frequent.

Relaxed bowels. Urine pungent when voided, increased solids.

Sleep restless, broken; brain active when awake during night.

By Thursday—5th day after beginning remedy, and 3d day from its discontinuance, symptoms were practically gone. An occasional twinge in the middle ear, r. or l., occurring.

All the sensations and symptoms were pronounced, but the medicine was discontinued when they seemed to become serious.

It was desired later to carry this proving still further if possible, and the same prover was secured.

December 31, 1903. Throat examined and found to be normal. Fer. phos. 30 to be taken every two hours.

4 P. M. Occipital throbbing.

5 P. M. (after 3d dose). Pain l. Eustachian, then in r.

Restless sleep. Desire for more oxygen.

Severe pain and tenderness in teeth disturbing sleep.

Two left upper bicuspid stopped five years, aching sharply for the first time.

Sense of elongation of teeth.

Impossible to close jaws without great pain.

Fully awake 1 to 2 A. M., pain most severe.

Neuralgia over the left face > warmth.

Throbbing pains, with sweat over head and face.

Submaxillary glands enlarged, r. and l.

Chilliness during day.

Face somewhat flushed.

The nocturnal symptoms as given recurred repeatedly for a week.

The last symptom to depart was pain or discomfort of momentary duration, but frequently repeated in one or the other Eustachian.

These symptoms were originated by seven doses Fer. phos.
30.

The prover complained of feeling very ill for short periods of time. He experienced a keen sense of unrest, apprehension, agitation, during the latter proving. The phase of remission of discomfort from time to time was marked, reminding of the character of belladonna pains in this respect.

It will be noted that in the first trial proving, no knowledge of the drug identity being possessed by the prover, the symptoms were those of congestion of mucous membrane of head cavities, to the degree of causing severe acute coryza.

In the second trial proving in the same subject, the disturbance was of essentially different quality. The head and throat were chiefly affected, it is true, but the structures involved were of the higher order. Inflammation quickly reached the nerve elements, and the ensuing pain was exquisite in its torture. The symptoms were also more persistent than in the first instance.

The following interesting verification from Dr. Bert B. Clark, is self-explanatory:

166 WEST 126TH ST., NEW YORK, November 16, 1905.

DEAR DOCTOR HUTCHINSON:

Enclosed you will find a history of that case of neuralgia which was cured with the 200th of ferrum phos. Have given same just as recorded on my card, elaborated to render more grammatical. Trust same may be of value to you.

The case was certainly an "eye-opener" for me. Thank you again very much for the advice.

Very truly yours,

BERT B. CLARK.

Case of Neuralgia.—Mrs. K. P. B., widow, age 48 years, occupation, none; residing in New York City.

Has three children, two healthy, but one a consumptive. No history of value as to previous diseases, but has a bad history of "worrying" habit. Has been much worried especially of late over her son's health and over financial affairs: hence, has been much troubled with insomnia. Has pyorrhœa alveolaris and has been treated for years for same. Very dark, almost Jewish, in face. Has a fiery temperament.

On September 20, 1905, was taken with left-sided neuralgia which seemingly started from the two upper bicuspid teeth and shot upward to the internal ear of that side. No evidence of ear inflammation of an acute type: some thickening of the membrana tympani as from an old catarrhal trouble. No appreciable increased loss of hearing. Both the bicuspid teeth are loosened by Rigg's disease. Pain is relieved by warmth: worse at night: and causes such great restlessness that patient cannot keep from walking. Is very despondent and worries: has not heard from consumptive son in over a week, hence the worry. Has no tenderness any place in or near the teeth or ear. Used various coal-tar products for several days, but with no relief.

Treatment:—9-24.—As. alb. 12th, hourly. No relief whatever. Patient getting desperate.

9-25.—Plantago 3x, hourly. No result. Also used plantago tincture, hot, in ear. (Used morphine sulph., gr. $\frac{1}{4}$, this evening to give some rest. Slept for four hours, but pain was then just as severe.)

9-26.—Aconite 6th, prescribed by another physician in my absence from the city. Also the doctor gave $\frac{1}{4}$ gr. of morph. per mouth. No relief. Temperature now 101° F.

9-27.—Patient can not bear the pain at all. Her spirit is broken. Cries. Hence, prescribed chamomilla 3x, with no result.

9-28.—Chamomilla 12th; no relief.

9-29.—Pain has changed in location, leaving the teeth and shooting upward from the ear to the temporal region in periodic shocks which absolutely "jerks the head backward." Gave sepia 12th, with no result.

(For some days have had running in my head a proving of ferrum phos. made by Dr. John Hutchinson and presented by him to the County Society a year or so ago. Could not find same in his published magazine articles, so communicated with him by telephone. My case seemed to be a similar one to his proving. On his suggestion then the following treatment was given):

10-1.—Ignatia 30th, one dose. Placebo.

10-2.—Ferrum phos. 200th, one dose, to be followed by placebo.

10-3.—Great improvement was manifested in twelve hours. Passed a fairly comfortable night. No medicine.

10-4.—Still improved, but very weak. Has great desire for cysters. Sent out last night at midnight and got some on half-shell. Ate twelve with relish. Complains of no ambition. Sees no reason now that pain is gone for her lack of same. She "simply lies and dozes with eyes half-closed. Has dreams of being carried away and then returned feeling good: followed by another "removal and return, which return is followed by a nasty sweat." In sleep seems to be almost delirious; talking nonsense in her sleep.

10-5.—No pain except at rare intervals. Lymph. gland just posterior to the sterno-mastoid muscle and on level with angle of jaw, left side, enlarged and tender. Has same desire for oysters. Is very weak. Dozes a great deal but wakes frightened: occasionally talks in sleep. Gave one dose of lachesis 500th.

10-9.—Much better since the lachesis and is now able to attend to household affairs. Has a few twinges of pain in ear and teeth, and gland is still enlarged but not tender. Gave one more dose of ferrum phos., the 200th.

11-1.—No medicine since. *Cured.*

DIAGNOSIS OF SURGICAL DISEASES OF THE LIVER, GALL BLADDER AND BILE DUCTS.

BY H. L. NORTHROP, M. D.

(Read before the Homœopathic Medical Society of the County of Philadelphia).

COMPLYING with the request of your entertainment committee, I offer the following diagnostic points on some of the surgical diseases of the liver and its bile-drainage apparatus.

Notwithstanding the protection given the liver by the lower thoracic and upper abdominal wall, it is liable to suffer contusions, punctures, or rupture, as the result of external violence. A fractured rib may penetrate it; a blow, or fall, against the right side may contuse, or even rupture it. Again, a bullet may pass through its thickest part without producing appreciable symptoms, while a blow upon the exterior, even though it fail to scratch or discolor the overlying integument, may be the cause of a fracture of the liver, resulting in death.

These facts are herein set forth to emphasize the difficulty of making a positive diagnosis of a hepatic injury without the

assistance afforded by laparotomy; to point out the trivial character of liver punctures or perforations in some cases, and to call attention to the friability and vascularity of this largest of all glands.

I remember a young man who accidentally shot himself, the bullet passing through the left lobe of his liver, through both walls of his stomach, perforating his diaphragm and lodging at the base of his left lung. A laparotomy enabled me to suture the stomach wounds and to find the liver perforations sealed,—less than three hours after the accident. He developed no abdominal symptoms whatever, but died of traumatic pneumonia seven days after the shooting, his respirations reaching 80 to the minute.

A colored boy was playing crap, and a policeman shot him as he tried to escape. The ball perforated the thickest part of the right lobe of the liver and lodged in the right kidney. I found but a teaspoonful of blood in the peritoneal cavity, while the kidney was so extensively lacerated that its removal was necessary. Not a single untoward symptom followed this injury and the boy made a record recovery.

A third case will illustrate the effects of a different kind of violence. S. D., male, age 24 years, was injured in a trolley accident. Not a scratch, nor a bruise could be found on any part of his body. His temperature, when admitted to Hahnemann Hospital, was 97°, pulse 110, respirations 24; one hour later, temperature 96°, pulse 72, respirations 38. He complained of pain in the region of the liver, his abdominal muscles were of board-like rigidity, and there was dulness on percussion below the right costal border; he vomited greenish yellow fluid; no blood was found in vomited matter, urine, or stool; he was pallid, and was undoubtedly suffering from internal hemorrhage. Although there was not even a scratch on his surface to indicate where he had been struck, I made a diagnosis of probable rupture of the liver on the physical signs enumerated above. I opened his abdomen through the upper part of his right semilunar line and found a large quantity of dark, free blood in the peritoneal cavity. Examination resulted in my finding a fracture of the liver beginning at the anterior border just to the right of the gall bladder, and running up through almost the entire thickness of the gland, while it completely divided the liver posteriorly, at its thickest part.

This rent was so deep that my hand placed in it was entirely hidden from view, covered over by liver substance. Hemorrhage was still going on, but slowly. I packed in yard lengths of iodoform gauze to make pressure and proceeded at once with slow saline infusion, for the man was in collapse. No further hemorrhage beyond a moderate oozing occurred, but he died in two hours. I tried hard to secure the liver for museum purposes, but my request could not be granted by the coroner, and was refused by the man's relatives.

The lessons in diagnosis taught by this rare case of extensive hepatic laceration are obvious.

Abscess of the liver requires considerable skill to diagnose. Let it be remembered that a hepatic abscess is rare in this climate, that it is commonly a tropical abscess resulting from dysentery, the *amœbæ dystenteriae* having been found repeatedly in the pus. Actinomycosis may produce it, when it will be of parasitic origin, but with us it is more likely to follow a cholangitis due to gall stones, an embolus from the portal system, or a pyæmic infection occurring in dysentery, typhoid fever, appendicitis, or ulcerations of the rectal wall,—in other words, as a part of an associated pylephlebitis.

We therefore see that abscess of the liver is most commonly secondary to disease located in some other organ, which is a sufficient explanation of the difficulty in diagnosing its existence, and the reason that it is so frequently overlooked. It should be suspected when there are present hepatic pain and tenderness, repeated chills followed by high temperature, jaundice, sudden and pronounced, and the well known symptoms of sepsis.

The following case will illustrate the possible difficulty in its diagnosis: Mr. B., age 57, had an attack of abdominal pain which was thought by his physician to be appendicitis; other symptoms then developed which led him to suspect typhoid fever; all symptoms disappeared in less than two weeks and the man enjoyed his usual good health. Two months later he was seized with excruciating pain, with tenderness to the right of the median line, most acute and lasting longer in the region of the appendix. These, and his history and other symptoms, led his physician to make a diagnosis of appendicitis.

I saw Mr. B. in consultation three days later, found him to have positive tenderness at the McBurney point, and right-

sided rigidity. After a thorough physical examination and a rigid cross questioning (for I was at first suspicious of gall bladder disease on account of the man's age and a slight, though persistent tenderness below the right costal margin), I conscientiously excluded gall bladder disease. I therefore confirmed the doctor's diagnosis of appendicitis, and the patient himself requested an operation. Three days later I complied with his request and found his appendix to have a deeply injected peritoneal covering and looking like one which was the victim of recent inflammation, now subsiding.

Making digital examination for further lesions I found the great omentum lightly glued to the fundus of the gall bladder. The latter was only moderately distended, its wall was thin and soft and I could feel no stones; the bile ducts were normal to palpation. After making the discovery that perhaps the real trouble was, or had been, in the gall bladder, I decided that my best plan was to close the appendectomy wound and await further trouble, rather than invite it by attacking the gall bladder then and there in the absence of sufficient evidence to warrant my doing so.

The man progressed finely for five days: no rise of temperature, no pain or tenderness, no nausea or vomiting, no jaundice, no chill, no night-sweating,—nothing but apparently an ideal, symptomless recovery. Then, without warning, he died, with symptoms of pulmonary embolus, in fifteen minutes. An autopsy, made by Dr. Sappington, did not discover an embolus, or any cause for the sudden death, but it found a gall bladder containing muco-purulent material mixed with bile and several minute calculi, a liver with three or four small abscesses, and both kidneys with multiple abscesses. (His urine had been examined before the operation and was declared to be normal.) This man had no evidence before operation of gall bladder disease except very slight and intermittent tenderness above and to the right of the umbilicus; at the operation the only evidence discovered was delicate adhesions between the omentum and the gall bladder. He had no symptoms at any time of the presence of even a single focus of pus.

To diagnose an abscess of the liver, inquire into the history for some one of the etiological factors, and add to this the presence of pain in the right hypochondrium, or referred to the shoulder, high temperature of remittent type, rigors and

sweats, jaundice, and possibly enlargement and tenderness of the liver, or perhaps a localized bulging below the ribs.

Primary tumors of the liver, gall bladder, or bile ducts are rare. The numerical relationship between primary and secondary malignant disease of the liver has been estimated as 1 to 40, and it is believed that even this is overstating the frequency of primary malignant disease. Primary carcinoma occasionally occurs; secondary carcinoma is found oftener than secondary sarcoma, because carcinoma is commoner than sarcoma, and primary sarcoma is rarely found along the alimentary canal, within the confines drained by the portal vein.

Permanent jaundice is strongly suggestive of cancer, or a tumor, closing the lumen of one of the ducts. Of course, other physical and clinical facts would very likely be found to corroborate such suspicions. In addition to the continuous jaundice the presence of a hard, non-sensitive tumor should be expected. Cancer of the ducts is most commonly situated at the ampulla of Vater, and this is a prolific cause of infective cholangitis, the obstructed bile early becoming infected with bacteria. Let it be remembered that carcinoma of the biliary passages is frequently caused by the irritation produced by gall stones.

A single adenoma of the liver is decidedly rare; multiple adenomata are nearly always found in association with advanced cirrhosis.

Simple cysts may be present, and are the result of biliary obstruction, perhaps associated with, or resulting from, cirrhosis, or they may develop from the softening and breaking down of adenomatous masses seen in nodular cirrhosis. They are seldom large enough to give rise to clinical symptoms, and hence are rarely diagnosed antemortem. When sufficiently large they simulate hydatid cysts, or perhaps even an ovarian cyst. A postmortem examination discovers the smaller ones, while the larger size is to be differentiated from a hydatid cyst by the absence of hooklets in the fluid contents.

Although uncommon, hydatid, or parasitic cysts are found more frequently in the liver than anywhere else in the body, because the liver arrests the embryos which have entered the portal circulation from the intestines. The diagnosis is based on the presence of a cyst in the liver, which is frequently of large size, and on the absence of constitutional symptoms.

Only an examination of the contents for the characteristic hooklets, either by paracentesis or incision, can make the diagnosis positive. If a large hydatid cyst fills the abdomen it may resemble ascites. The trocar and cannula will settle the diagnosis. A large ovarian cyst may resemble a hydatid cyst, but the character of the fluid, the history of its locality of origin, whether beginning in the upper abdomen or springing from the pelvis, ought to throw light on the diagnosis. A hydatid cyst is apt to be more or less displaced by the descent of the diaphragm during respiration; an ovarian cyst will not move with the diaphragm.

The diagnosis of inflammations of the gall bladder and bile ducts is, at the present day, a comparatively easy matter, as the result of the widespread professional interest manifested in diseases of the drainage apparatus of the liver. A diagnosis of cholelithiasis is often made, however, when the true condition is a cholecystitis, and acute cholecystitis is at times easily mistaken for appendicitis. The earliest symptoms of cholecystitis are localized pain and tenderness. The pain is paroxysmal, resembles that of gall-stone colic, but is less excruciating. It must not be forgotten that more or less concomitant cholecystitis is the rule in cholelithiasis, hence, the symptoms of both will be manifest. The pain is located in the epigastrium and right hypochondrium, and may extend downward into the right iliac region and be so intense there, with associated tenderness, as to lead to a diagnosis of appendicitis. This may be explained by the presence of a localized peritonitis involving the serous coat of the appendix and cæcum, and it is not at all surprising that cases of cholecystitis are often diagnosed and operated upon as appendicitis. In cholecystitis there is tenderness over the right upper quadrant of the abdomen, most acute in the gall bladder region, at the Mayo Robson point, which is at the junction of the upper two-thirds with the lower one-third of a line drawn from the ninth rib to the umbilicus. The gall bladder may be distended, palpable, or even visible and fluctuating, and in its enlargement may reach so far below as to simulate an appendiceal tumor. (I could report several such cases, did time permit.)

Cholecystitis may possibly be differentiated from cholelithiasis, then, by noting that the attacks are less severe, no gall stones are found in the examined stools, jaundice is not pres-

ent unless the inflammation extends to the ducts producing spasm and obstruction there, and the infection will often yield to non-operative treatment. Should it not, operation will be the only deciding means.

In considering the diagnosis of gall stones, let it not be forgotten that they may be present in a gall bladder for years and give rise to no recognizable symptoms. But cholelithiasis is characterized by paroxysmal attacks of pain, or "colic," coming irregularly and without any known or discoverable cause, beginning in the epigastrium or right hypochondrium, possibly spreading over the abdomen and extending through to the back and to the right subscapular region. The pain is aggravated by taking even liquids into the stomach. Symptoms of localized peritonitis may be present. Vomiting is a common symptom and occurs easily. If the biliary calculi are contained in the hepatic, or common, duct, jaundice, slight and transitory, or intense and prolonged, supervenes. Intermittent, or remittent jaundice is indicative of a stone moving back and forth in the common duct, or one which produces varying degrees of obstruction. It is called a ball-valve stone (described by Fenger). Clay-colored stools complete the ensemble of bile-duct obstruction.

Cholangitis should be diagnosed when rise of temperature, chills, night-sweats, gall bladder pain and tenderness, and jaundice occur. Such symptoms, developing during or after typhoid fever, should excite suspicion of cholangitis.

CHOLECYSTECTOMY.—John F. Erdmann, after having performed twenty primary cholecystectomies, believes it to be the operation of choice in affections of the gall bladder. He advocates the operation because of its simplicity, the diminution of post operative convalescence; elimination of secondary operation, and that it dispenses with a viscus, dangerous to the owner when once infected. He does not advise it in every case, giving the following contraindications: Apparently healthy gall-bladder in cholelithiasis and pericholecystitis; perforation into other viscera, when the difficulty of closing the anastomosis is great; perforations in the suppurative variety when adhesions are extensive, and where life would be jeopardized by such radical interference; malignancy when extensive, and when hurried operation is indicated to save life. Two deaths occurred in this series, both in severe cases. The appendix was found to be markedly diseased in several of the cases and was removed in sixteen of them.—*New York Medical Journal*, February 24, 1906.

CORRESPONDENCE.

ETIOLOGY OF MENSTRUATION.

41 WEST FIFTY-SECOND STREET,
NEW YORK, March 22, 1906.

EDITOR HAHNEMANNIAN MONTHLY.

SIR:—It was with much interest that I read the excellent article on "The Etiology of Menstruation," by Dr. John E. James, Jr., which appeared in the March number of the HAHNEMANNIAN.

In that article I note the following remarks: "It was at one time believed that without ovaries, menstruation could continue, and quite a few cases are on record where the woman bleeds after a double oophorectomy. In the light of present day experience this idea is false; such reports are misleading. . . . Without functioning ovaries there can be no menstruation," etc.

I am sorry to disturb any conclusion which seems based on good scientific observation, but I offer the following as evidence on the other side:

About fifteen years ago I removed both ovaries and tubes from a woman who was suffering from pelvic disease, and at that time oophorectomy was a very popular operation. I took particular pains to remove the tubes close to the uterus, and was especially thorough about it.

To my surprise menstruation kept on regularly every month and continued to do so for several years afterwards, until I lost sight of her.

Yours truly,

SIDNEY F. WILCOX.

OPHTHALMIA NEONATORUM.—The author holds that rigid cleanliness, while it will greatly diminish the number of cases of blindness from this cause, will not always prevent it, and that the Crede method, while efficient, sometimes causes irritation. He sees some hope in the use of the less irritant silver salts than the nitrate, but believes that we need more experience in their use before we can give them the same confidence. Even in case of actual purulent disease, careful treatment will usually prevent blindness. He thinks that social conditions favoring or opposing the spread of gonorrhea are more important than legislative measures aimed directly at purulent conjunctivitis, and that gonorrhea is a malignant, contagious disease and should be publicly recognized and dealt with as such in all its clinical manifestations.—*Dr. E. Jackson, Denver, Jour. Eye, Ear and Throat Diseases.*

NOTES ON MATERIA MEDICA.

BY MALCOLM M. DOUGLASS, M. D., BALTIMORE, MD.

CANNABIS SATIVA.

Vertigo; when standing; when walking, with tendency to fall sideways.

Frontal pain; beneath eminence, extending to occiput. Compression from margin of orbits to temples. Pressure in temples.

Pressure from behind the eyes forward. Sensation of spasmodic drawing in eyes.

Eructations of air; of bitter, sour, acrid fluid. Stitches in front of stomach near pit, just below ribs, better bending trunk forward or backward, soon returning. Anxiety in pit of stomach, with oppression of breath, palpitation. In the abdomen, painful jerks, as from something living, moving from one place to another (crocus), with drawing pain from left hip-bone across to right, and thence into knee, still the pain remained in hip, where it was a tearing, pushing pain. Sticking in left side just below ribs.

Pain in rectum and in sacral region while sitting, as if intestines would be pressed out. Constrictive pain in anus, with sensation as if thighs were drawn together, so that she must close them.

Urging to urinate, with pain. Micturition in a split stream. Stitches along urethra when not urinating; jerking in urethra, posteriorly while standing. Zigzag tearing in fibers. *Inflamed sensation, with soreness to touch, and with tensive pain during erection. Burning-biting pain, extending backward from orifice while urinating, posteriorly more sticking.* Pressure to urinate, especially in forepart of urethra, when not urinating. *Burning while urinating worse just after urinating.* Burning at beginning and end of micturition. Burning pain in fore part when not urinating, compelling him to urinate almost constantly, even when there is no more urine to pass.

The above symptoms would indicate cann. sat. in the treatment of *urethritis*, with burning, biting pain extending backward towards bladder when urinating, with frequent urging to urinate, the urine is scalding, with spasmodic closure of

the sphincter of the bladder; cystitis in consequence of gonorrhœa, with bloody urine; gonorrhœa, great swelling of prepuce. This drug is useful in gonorrhœa immediately following aconite, provided aconite has been indicated in the first few hours of the disease; cases which require cann. sat. have less profuse discharges than those requiring arg. nit. and usually there is much less swelling and inflammation about the glans penis, though the excessive swelling of the prepuce has proved a valuable indication in some cases.

Glans as dark red as the prepuce; glans covered with red spots. Penis painful as if excoriated or burnt when walking (with necessity to have it suspended). Penis swollen, without marked erections. Frequent erections, then stitches in urethra. Dragging in testicles when standing. Desire excited.

Tough mucus in lower part of trachea in morning, with ability to loosen only a little, which he must swallow, after hawking and coughing, scraping in trachea as if raw and sore, finally the mucus loosens itself, and he is obliged to hawk it up repeatedly. Breathing oppressed; from tensive-pressive pains in middle of sternum, which was sore to touch, with sleepiness. Hacking, from pit of throat, with which a cold salt fluid is felt deep in throat. Asthma, with mucous rales, extreme dyspnoea.

Digging beneath upper part of sternum, without oppression of breath. Oppression, with apprehension in throat and necessity to breathe deeply. Heart beats as if it would fall out on moving body and on stooping, with warm sensation about it.

Drawing pain in kidney region, extending into inguinal glands, with anxious nausea in pit of stomach.

Waking at night with frightful dreams, without knowing where he was. Disagreeable and frightful dreams, he is disappointed in everything and filled with anxiety.

Coldness, as from a drop of water on parietal bone, then in other places on head.

CINCHONA.

Cinchona bark is obtained from several species of an extensive order of evergreen shrubs or trees. In some localities and latitudes it is a beautiful forest tree, 60 to 80 feet high; in other places and higher latitudes, it is a shrub, 6 to 10 feet high. The bark is obtained from the branches, trunk and root.

It is a native of South America; seldom found in its wild state, but cultivated in India and the islands of Ceylon and Java, the former locality yielding only about one-twentieth of the world's supply.

The discovery and history of this remarkable drug is traditional. Introduced into Europe about 1632, it was not known to naturalists until 1737. (It is of particular interest to the homœopathic school as being the immediate cause, while studying its effects, of Hahnemann's discovery of the law of cure.

The ingredients which confer physiological and therapeutic power upon the cinchona barks are very numerous. They may be divided into four groups, varying in importance, but perfectly well distinguished from one another, and excepting the last, these are again resolvable into smaller groups. The primary ones are as follows:

Alkaloids.

Simple Acids.

Tannins.

The resinoid Kinovine.

Alkaloids.—These are resolvable into quinine, cinchonine, quinidine, cinchonidine, aricine. There is also the so-called quinoidine, an impure residue of manufacture from which is prepared the amorphous quinine of Leibig.

Quinine exists in all the medicinal cinchonas, but is most plentiful in "yellow bark," occurring in natural combination with kinic acid and kino-tannic acid. The pure alkaloid is a strong base. It completely neutralizes acids, and produces with them both neutral salts and acid salts which are crystalline. It is very insoluble in water, freely soluble in alcohol, and less so in ether. The solutions are distinguished by a remarkable blue fluorescence. Excess of chlorine-water, and the subsequent addition of ammonia, produce with the salts an emerald green. Quinine *per se*, is never employed in medicine. By far the most commonly used salt is the neutral sulphate, which

crystallizes in tufts of fine silky needles, and occasionally scales. These are so light that the aggregate of the mass occupies considerable space. In ordinary states of the atmosphere and of storage, the sulphate contains at least two equivalents of extraneous water, which can be entirely driven off by a temp. of 248° F., but speedily becomes absorbed. The purely bitter taste of quinine is highly characteristic.

Of late years, however, and especially in Germany, the neutral hydrochlorate of quinine has been preferred by many physicians not only on account of its superior medicinal qualities, but because it is less subject to the fungus which spoils ordinary quinine solutions. The sulphate and the hydrochlorate are probably capable of accomplishing all the good that can certainly be effected by quinine.

Cinchonine is most abundant in the paler varieties of bark. It forms clear, colorless, four-sided prisms, which are soluble in 30 parts of water, and are very insoluble in alcohol and in ether. With acids it forms soluble salts, which do not fluoresce in solution, and are turned lightish brown-yellow by the chlorine and ammonia tests.

Quinidine, contained in many varieties of bark, is an alkaloid isomeric with quinine, with two equivalents of water, but is less intensely bitter, and less soluble in water and in ether. It gives a similar fluorescence, and the same color with the chlorine and ammonia tests. Sulphate of quinidine is much more soluble in water than sulphate of quinine.

Cinchonidine is isomeric with cinchonine. It occurs in large, shining, striated, rhombic prisms, which are anhydrous, and scarcely at all soluble in ether. The solutions are fluorescent, but do not answer to the chlorine and ammonia tests. In taste, it is less bitter than quinine.

Simple Acids.—The simple acids contained in the cinchona barks are the kinic and the kinovic.

Kinic acid forms large, transparent, colorless tablets, the taste of which is strongly and purely acid. They dissolve very easily in cold water; much less readily in boiling water. They are more soluble in weak than in strong alcohol, and in ether are nearly insoluble.

Kinovic acid was for a long time supposed to be obtainable only by artificial means from the resinoid kinovine. It is now known to be a natural ingredient of the raw kinovine, or at all

events of the kinovine which is furnished by the cinchonas grown in Java. This acid is probably of far greater importance than the kinic; recent researches have invested it with much interest.

Tannin.—The tannic acids of the cinchonas are two: kino-tannic acid, and kinovi-tannic acid.

Kino-tannic acid is a bright yellow mass, easily pulverized, but very hygroscopic, and possessed of a sour and astringent, but not bitter taste. Friction renders it electrical. It dissolves readily in water, alcohol, and ether.

Kinovi-tannic acid is of a clear, transparent, yellow color, and in taste is somewhat bitter. It is soluble in water and in alcohol, but not soluble in ether.

Kinovine is an amorphous resinoid body, which can be rubbed into a smooth white powder, possessed of manifestly electric properties. When warmed, it evolves a feebly balsamic odor. The taste, though very slight, is sharp, and unpleasantly bitter. The reaction is neutral; it is excessively hygroscopic; hardly at all soluble in water, very soluble in spirit, somewhat less so in ether. Dry distillation with lime develops metacetone and resinoid bodies. Heating with strong nitric acid causes the evolution of red fumes. Concentrated sulphuric acid gradually dissolves it with a dark red color. Hydrochloric acid vapor conducted into an alcoholic solution causes the development of kinovic acid along with kinova sugar.

Physiological Action.—The action of the cinchona barks upon the living organism is very complex; indeed, it is not yet possible to specify in full detail, either the whole of the effects which the bark itself can produce, or the precise shares which are respectively contributed by the several ingredients. We will give some account, first, of the action of cinchona bark itself, and then of the effects produced by the active ingredients already enumerated. The following facts, in regard to cinchona barks in general, are pretty well established:

(1) When given in very large doses, they produce the phenomena which are known as "cinchonism," and which will presently be described under the head of quinine. But for the production of these phenomena extreme doses are required, and long before they commence certain disturbances come into play.

(2) Upon the mucous membrane of the alimentary canal,

cinchona bark produces effects which are probably quite independent of those induced by the alkaloids, and which are attributable to the astringent ingredients.

Physiological Action of Quinine.—This subject has assumed vast proportions, and every month adds so much to our knowledge that it is nearly impossible that we should fail to omit some more or less important facts. It is necessary to consider quinine first in its physiological relations to protoplasm, and afterwards as to its action on the various organs of the body. That quinine in large doses is a protoplasm-poison has been lately proved by a number of observers.

As long ago as 1849 Bucheim and Engel had observed that quinine had power to check the progress of alcoholic fermentation; and the interesting researches of Pasteur, which came later, directed general attention to the importance of the low organisms which are present in fermenting liquor.

Quinine very rapidly enters the circulation of men and of animals, whether put into the stomach, the subcutaneous tissue, or the cavities. It is also very rapidly eliminated again, nearly the whole dose taken being discharged as quinine in the course of about twelve hours. Yet it has been proved that quinine itself (or a body in every respect resembling it) is, in minute proportions, a natural constituent of the body. Under these circumstances it is interesting to inquire whether more quinine is retained in the body when the drug has been given to a fevered, than when it has been given to a healthy subject.

The power of quinine to reduce bodily temp., which is mainly a therapeutic and not a physiological effect, must be mentioned in this place, because it stands, or stood until lately, on debatable ground: it was doubtful, that is to say, whether the influence is one exerted through the nervous system by the medium of a supposed heat-regulating centre in the brain, or whether it is a part of a more generalized action on the tissues and fluids of the body. At the present time it is evident that scientific opinion is coming to agree that the lowering of bodily temp. is produced by means of a general interference of quinine with the oxidation processes of the body in almost every part of it.

The special action of quinine upon the nervous system is most clearly seen in the symptoms which are associated with "cinchonism." When a patient is saturated with excessive

doses of quinine, he gets loud ringing noises in the ears, splitting headache, vertigo, amaurosis, sometimes even delirium. In animals, a fatal dose of quinine has often produced convulsions and paralysis of the hinder extremities. It would appear that the lowered sensibility of parts, and the diminished muscular action, are due not to direct paralysis of nerves or to any interference with muscular irritability, but to a diminution of reflex action. For man it is not easy to say what would be a fatal dose of quinine, since enormous doses have been given with only temporary bad effects. Still, it is certain that, if the stomach could be got to retain a sufficient quantity, we should have a fatal result, preceded, in all probability, by convulsions.

There are other local poisonous actions of quinine which are less constant, and which we can but little explain. One of the most singular of these is its very powerful and disagreeable action on the skin of many patients. Most medical men have met with one or two individuals in whom any dose of quinine, but especially a large one, produced irritation of the skin, followed by free desquamation; cases have not unfrequently been seen in which the whole skin of a hand or even of a limb has come off like a glove or a stocking.

Physiological Action of Cinchonine.—This alkaloid, formerly supposed to be next in activity to quinine among the cinchona alkaloids, is now known to be the feeblest of them all. The experiments show that upon dogs the fatal dose of cinchonine was one-fourth larger than the quantity of quinine which would kill other animals of the same weight. The influence of cinchonine as a protoplasm-poison, though resembling that of quinine, is weaker not only than the quinine action, but than the action of either of the other alkaloids.

Physiological Action of Quinidine.—There is every reason to believe that this corresponds exactly in every particular with that of quinine.

Physiological Action of Cinchonidine.—The great powers and activity of this alkaloid have only of late been appreciated. As a protoplasm-poison, and probably in every other physiological relation, it comes next to quinine and quinidine, and decidedly above cinchonine.

Therapeutic Action.—The curative effects of quinine and the other alkaloids of cinchona are manifold, and may be distributed into four chief divisions: Antimiastic, antiseptic.

antiphlogistic, and the special actions on morbid conditions of the nervous system. Probably indeed there should be a fifth class including the so-called oxytotic action of quinine on the uterus, and some other more doubtful examples of its immediate action on muscular viscera.

The antimiasmatic action of cinchona alkaloids, by means of which they put an end to the morbid processes induced by the so-called paludal poison, is still the most interesting as it was the most anciently known therapeutic effect of bark. It is a fact as familiar to the public as to the medical profession that intermittent and remittent fevers yield promptly to the influence of bark or quinine.

We have now to consider the practical employment of quinine in the malarial fevers. The simplest case is that of the typical intermittent fevers in the acute stages; but there are conflicting opinions as to the best method of administration even in these diseases. Probably almost any method which insures the daily absorption into the blood of some 5 or 6 grs. of quinine would, in the end, cure any not extremely severe case of intermittent fever; but strong statements have been made by different allopathic authors in favor of different modes of distributing the dose. By some it has been laid down that we ought to give a single large dose of 20 or even 30 grs. immediately before an attack is expected; others say that a smaller dose should be given, but immediately after a paroxysm, or even while the final (or sweating) stage of the fit lasts. Others, again, advocate the continuous use of large doses, both during the paroxysm and also during the periods of intermission; while another, and this perhaps the largest group of authorities, maintains that quinine should be given only during the intermissions, and then in repeated small doses (2 to 4 or 5 grs. or less).

In the severe forms of intermittent fever which are met with in tropical countries, and the pernicious remittents require the use of large and continuous doses of quinine.

It is not only in cutting short the typical symptoms of malarial fever that quinine is valuable; the majority of the complications of these diseases, of whatever kind they may be, yield better to the treatment by quinine than to any measures addressed immediately to the organ that appears to be suffer-

ing. Among these complications of ague, one of the most remarkable is the tumefaction of the spleen which forms the so-called "ague-cake"; and in a less degree the liver is liable to a similar change. In the majority of such cases, the action of quinine in reducing enlarged spleen is not less decided than its influence in cutting short the course of the general feverish symptoms. It is so likewise with the intense gastric irritability, causing incessant vomiting, which is almost universal in bad remittents; nothing quiets the stomach half so effectually as the production of full cinchonism. And the distressing pain and heat of the head, which drives such patients almost frantic, is also far better treated by the influence of quinine than by any local or other remedies for the mere symptoms.

In neuralgias of malarial origin there is generally a much more regular periodicity of the attacks than in the neuralgias which are independent of this cause; and advantage should be taken of this fact to apply the principles already laid down in speaking of intermittent fevers. Instead of continuing a number of small daily doses, it is far better to reserve the drug for employment at a time when a paroxysm may be confidently expected shortly to occur. About an hour before the time of the anticipated, a heavy dose (5 to 15, or even 20 grs., according to the degree of the patients' familiarity with the drug) should be administered; it is not a bad plan to give the drug in a glass of sherry. Seldom does it fail to produce decided effects; the paroxysm either ceases altogether, or is much weaker than usual. The same plan is pursued before the next expected recurrence; and the neuralgia rarely fails to disappear entirely after a very few such repetitions of the dose.

The above plan is most suitable to severe cases with short intervals; in milder examples of the disease it may doubtless be sufficient to impregnate the system with a daily amount of 3 to 6 grs. in divided doses.

Epilepsy of malarial origin is very effectively combated with quinine; few things are more remarkable than the uselessness of this drug in common epilepsy, compared with its magical operation in the malarial form of the disease. The proper method is to give regular, moderate doses (about 6 grs. a day) for several weeks in succession.

In the so-called septicæmic fevers, a large and not very accurately determined class, but of which the principal representations are well recognized, quinine has a part to play only second to that which it fulfils in the malarious fevers. With regard to the individual members of this group of diseases, it is true that there are other remedies that frequently prove more directly and specifically effective. But in the whole series of this variety of blood-poisonings, quinine holds a permanent place as a remedy; for whether in erysipelas, in surgical pyæmia, or any other of the infections which are specially connected with the absorption of putrid matters or of their emanations, when once a certain gravity of organic disturbance is reached—when the fever is excessively high, and the nervous system profoundly agitated and depressed—there is scarcely anything medicinal which offers the same chance of reducing the pyrexia, of relieving the inflammatory complications, and of sustaining the vital powers during the struggle, as quinine given in large and repeated doses.

The hectic fever even of some chronic diseases is probably in a certain number of instances at least partly due to septic infection. In many examples of phthisis, with lung softening, one can hardly doubt that the rhythmic recurrence of fever is at least as much due to the absorption of putrescent matter from the cavities as to the exhaustion of the nervous system. Still less can we doubt that the hectic attending very large chronic abscesses connected with carious bone partakes of the character of a true pyæmic poisoning in minute but incessantly repeated doses. In both these last-quoted examples the influence of quinine can ordinarily only be effective when it is given in considerable quantities.

In pneumonia, at any rate in the stages of dry, pungently hot skin, it will be much better to commence with aconite, even if we afterwards employ quinine.

The use of quinine in nervous diseases is a subject with regard to which every one seems to assume that a great deal is known; yet, when we come to test this knowledge, much of it will be found to be very vague, and a good many of the popular views are certainly incorrect.

In neuralgia, quinine is to this day considered the sheet-anchor by most allopathic practitioners, although the erroneousness of the opinion has been pointed out by many high au-

thorities. If we exclude the cases which are partially or wholly due to a malarial influence (and which form a very small proportion of the neuralgias actually encountered in practice), it will be found that quinine has not an extensive sphere of curative action. It has some hitherto unexplained preferential influence on the neuralgias of the ophthalmic division of the fifth cranial; but upon neuralgias of other nerves it frequently—perhaps most frequently—fails to produce any decided impression. In fact, not only is this the case, but we often meet with patients in whom much harm has been done by attacking an ordinary neuralgia with repeated and increasing doses of quinine; the nervous system gets seriously upset; there is more or less marked cinchonism; and the pain, so far from being relieved, is aggravated. It is a stereotyped remark in medical works that the more exactly a nervous (or indeed any other) disease conforms to a regular type of periodic exacerbations, the more surely will quinine prove useful. As a general proposition this is untrue. It is only when the neuralgia is due to actual malaria that the rule holds; and in the case of recurrent inflammations, or of hectic, there must be either malaria or else septic poisoning at work, or else we shall find this maxim fail us.

In chronic alcoholism, and in some varieties of chronic insanity, quinine is frequently useful. It is useless to administer it in large quantities; from 2 to 6 grs. daily is enough.

In all gangrenous conditions, whether the result of ordinary inflammation badly complicated, or of a specific or septic poisoning, quinine has often proved itself to be of value.

As a general tonic it is universally agreed that the condition in which quinine produces most decided benefits is that in which the flesh is flabby and the skin too perspiring.

Whenever we can give quinine in the solid form we may quite trust the stomach fluids to dissolve it, and for most persons this answers very well. Any one who cannot conveniently swallow pills can either take one of the convenient preparations of chocolate which are now made, with a definite dose in each piece, or can effect the same purpose by enclosing the dose of solid quinine between the two halves of an ordinary chocolate "drop" and eating it up. Chocolate is exactly the right thing for covering the taste of quinine.

By patients who are severely ill with acute disease we often

cannot get sweet things taken, and if we have any difficulty in getting the requisite doses taken by the mouth it is better to administer them in enema. The hydrochlorate of quinine is evidently the best preparation to use in enema. This preparation is also best for giving quinine subcutaneously. It is true that in order to inject as much as one grain we shall have to use about 25 minims of distilled water. One grain given in this way is at least the equal of three, if not four, grains given by the mouth.

Quinine can be very readily given by inhalation of solutions, and this procedure is very useful in many conditions of the larynx, bronchi, and air-cells in which a local antiseptic effect is required. A convenient method is to dissolve eight grains of hydrochlorate or sixteen grains of sulphate of quinine in twenty ounces of distilled water; this solution gives a very good spray for inhalation.

The above gives the principal diseases in which the allopathic physician makes use of quinine, and the dose, and manner of administering the same. There are a number of other diseases in which they employ some one of the different preparations of quinine, but there is a difference of opinion among the authorities. What we have said should give you a pretty clear conception of the allopathic use of this truly wonderful remedy. In our next lecture we will look at this same remedy with homœopathic eyes.

ACTION OF ADRENALIN ON THE EYES.—Results of the action of adrenalin on the eyes, are given by the author as follows: Injection of 3 drops into the conjunctiva produces contraction of the latter and paleness, without loss of sensation; the stronger developed the net of vessels, the weaker is the effect; the pupil dilates little; diffusion into the anterior chamber is enlarged. Adrenalin has no effect on accommodation, nor on the vessels of the retina and choroid. Injections of adrenalin under the conjunctiva had but little effect on its blood vessels, and none at all on those of the retina and choroid. Preliminary introduction of adrenalin before introducing atropin or scopolamin, or pilocarpin, or eserine, called forth quickly the maximum effect of these drugs. Preliminary introduction of adrenalin before inducing cocaine anæsthesia increases the power of the latter, the time length of action and hastens its appearance. In the majority of cases the injection of a weak solution of adrenalin (a single injection) into the interior of the eye, produces no effect. Adrenalin in ophthalmic practice is useful in acute conjunctivitis, phlyctenulæ, and in combination with atropin, in iritis.—*Jour. Eye, Ear and Throat Diseases.*

EDITORIAL.

SHOULD A CHANGE OF CLIMATE BE ADVISED TO TUBERCULAR PATIENTS?

UP to within a very few years ago the sole stock of advice which the average physician had for the tubercular patient was very much like Horace Greeley's suggestion to the youth who desired business success; "Young man, go West." The fountain of health of the medical man, like the fabled "El Dorado" of the gold seeker, lay afar off. Slowly there has been a change of opinion in regard to this matter, and physicians are beginning to consider whether the treasure they looked for at a distance is not, after all, nearer at hand.

The following letter which has been sent out by the Committee on the Prevention of Tuberculosis of the Charity Organization Society of the City of New York contains a great deal of wholesome advice on this important subject:

DEAR DOCTOR:

The Committee on the Prevention of Tuberculosis of the Charity Organization Society takes this opportunity while the American Tuberculosis Exhibition is being held at the Natural History Museum, and while the subject of tuberculosis is prominently before the community, to call to the attention of the medical profession of the City of New York the consequences arising from the practice of sending poor consumptives to such States as Arizona, Colorado and California. Extensive experience has taught us that, difficult as it may be for a poor man to recover from tuberculosis in this city, he is better off here among his friends and relatives, where there are more adequate hospital and dispensary facilities, than he is far from home, where he is thrown entirely upon his own resources and where the great number of consumptives willing to work at the lowest wages make the finding of employment, especially of suitable employment, almost impossible.

Favorable results from climate can hardly be looked for unless at least \$10 per week can be spent for board and lodging. The stranger, who has spent a large part of his savings on

railroad fare, soon finds himself without work, living in the poorest rooms, eating the scantiest and cheapest food.

The practice of advising the removal to other climates thus defeats its own aims and casts upon the charity of other communities a burden which they should not and cannot sustain.

We invite the co-operation of the medical profession, therefore, in preventing persons suffering from tuberculosis from being sent to other States unless;

(a) They are physically able to work and have secured in advance a definite assurance of the opportunity to perform work of a proper character at wages sufficient for their suitable support; or,

(b) Unless they have at their disposal at least \$250 in addition to railroad fare.

Respectfully yours,

THE COMMITTEE ON THE PREVENTION OF TUBERCULOSIS OF
THE CHARITY ORGANIZATION SOCIETY.

The above communication is addressed specially to those whose financial means are very limited. No one who has studied the practical aspects of the tuberculosis problem can doubt the wisdom of this advice to such a class of patients. Nitrogenous food, the most important of all types of food for the consumptive, is expensive in every locality. If the patient is compelled to rely on his own efforts for support, he is cut off from a therapeutic measure which is of the utmost importance in all cases of pulmonary tuberculosis except the very incipient ones, namely, bodily rest. Should an acute illness of any character develop the penniless victim becomes a burden on the charity of those who have no personal interest in him whatever and who are already burdened by a similar class of unfortunates. The committee has been very conservative in fixing \$250 as the minimum sum which a patient going to a strange community should have at his disposal, and physicians will be conferring a great benefit on their patients if they are guided by the suggestions of the committee.

With patients whose financial condition is such that the matter of expense does not have to be considered in deciding this question, there are several other factors which the physician must consider before he sends the patient to a different climate. The success of the modern treatment of tuberculosis has not been due to the discovery of a specific drug or of a

specific climate. It has been due to the recognition of the fact that nature is able to successfully combat the disease, provided nutrition is maintained at its highest level. This is accomplished mainly through three agencies; fresh air, hypernutrition and rest. Brehmer is the authority for the statement that he could cure tuberculosis in any climate provided he could secure these three conditions.

The chief value of climate in the treatment of the disease, is due to the fact that the patient is able to be out of doors under more favorable conditions a greater percentage of time in some climates than in others. Climate itself has no demonstrable effect on the disease. Thus in the Blood Indian Reserve of the Canadian NorthWestern Territories, situated at the foothills of the Rocky Mountains in one of the finest climates in the world, the death rate from pulmonary tuberculosis in six years among a population of two thousand was one hundred and twenty-seven, or twenty-three per cent. of the total death rate. In certain parts of the Alps also the death rate from this disease is very high. On the other hand, the results of sanatorium treatment in England and in the lowlands of Holland have been most successful.

The Continental and English authorities are agreed, also, that their patients as a rule do better in winter than in summer, despite the fact that the conditions for open air life are more favorable during the latter season of the year. The conclusion to be drawn from these facts is, that climate is a minor factor in the cure of tuberculosis and that the other essential measures should not be sacrificed merely for the sake of a change of climate.

Another point for the medical adviser to consider is, that the patient is practically compelled to remain in the climate in which he has been cured if he is to avoid the risk of a further breaking out of the disease. Latham says, "With regard to climate and position, I would say at once that most physicians who have had much experience of sanatorium treatment, and who have watched patients for some years after their return from a sanatorium, agree that as far as possible *all patients should be treated under the same climatic conditions as those which they are likely to experience in their subsequent life.*" This is a very important fact, and one on which Latham lays great stress. To send a patient to some distant climate

where he must practically spend the rest of his life away from his friends and often away from his family is to many individuals almost as serious a misfortune as death itself and is only to be advocated when the physician finds it impossible to place the patient under favorable conditions for treatment nearer at home.

Another question which often presents itself to the physician when he advises a patient to go to some distant climate is; "Is the patient likely to be taken helplessly ill or to die before he could have a chance to return home?" Families often object to one of their number who is in an advanced stage of tuberculosis being taken to a distance because of this fear of their dying away from home. Their objection may be based only on sentiment, but what can be more pitiful than the sufferings of the feeble and disheartened consumptive, dying among strangers and in a strange land? No physician is justified in sending patients in advanced stages of the disease to distant locations unless there are reasonable grounds for belief that the patient will improve or unless the patient clearly understands all the risks involved and is willing to go under those conditions.

To summarize, the conclusions which have been reached by most modern students of this subject are: First, Patients whose financial means are very limited can be more successfully treated in their own community. Second, Patients affected with mild forms of tuberculosis can be successfully treated in any climate where pure air can be obtained and should preferably be treated in the locality in which they expect to live during future years. Third, Patients with much emphysema or albuminuria should not be sent to high altitudes, nor should those with marked cardiac debility. Fourth, Patients in advanced stages of the disease, or those in whom hemorrhage is a prominent symptom, should not be sent to distant communities unless the patient fully understands the risks involved.

MORE GRAFT OF SERIOUS CHARACTER.

It has long been an old trick with manufacturers to induce physicians to become stockholders in their concern in order to effect what might be called an unconscious bribery. The idea

seems to be that if a physician is financially interested in the profits of a concern he will make use of its products or specialties in the treatment of his patients. The ethics of the procedures is debatable. We are under the impression that old school physicians regard it as *infra dig.* to hold partnership in drug stores to which they send their prescriptions, though such practice does not inure to the disadvantage of the patients, because the physician-druggist orders in his prescriptions such medicines as he thinks indicated. In the case of a specialty manufacturing firm, it is different, for the mind of the prescriber goes unconsciously in the direction of his investments.

But the above is not the evil to which we now call attention. Briefly stated, the scheme is this: A company manufacturing a specialty puts out little blank books made up of prescription blanks and stubs. These are distributed among such physicians as consent to receive them. The prescription blank is used for ordering the specialty manufactured, while on the stub is recorded the name of the patient, his address, the name of the drug store to which the prescription was sent, and the date. When the book of fifty prescriptions is filled, the stubs are sent to the manufacturers, and the lucky (?) physician receives one share of stock in the corporation.

If this were all, we might permit those who descend to such low depths to wallow in the mire; but the agents of such concerns have in two instances within our knowledge, used the names of eminent physicians of high ethical principles as endorsing the scheme in practice.

How the affair can impress any one favorably, we fail to understand. In the first place, the sending of the names of one's patients to a mercantile concern is a violation of professional confidences, and cannot be too strongly condemned. Moreover, it must react eventually on the prosperity of the physician who sends them. Are not physicians aware that there are directory specialists who sell to various concerns lists of names of persons interested in this or that project or articles of manufacture? Eventually such lists made up from the stubs will become merchandise of this class.

In the second place, think how cheaply the physician who lends himself to this scheme sells himself. Let us assume that the stock is fifty dollars *par*; and that it bears ten per cent. dividends. This means that by selling the drug to fifty pa-

tients he deludes fifty of his patients for five dollars per annum in perpetuity. To be exact, it is an increase of ten cents in one's annual income for each "delusion" perpetrated.

Really the whole affair is worse than trading stamps. We expect they will come eventually. It is said that the undertaker has already taken advantage of this means of securing trade. To attest the demand the following story has been told: "The undertaker was about to depart from the presence of the grief-stricken widow. As he stood at the door, he asked: 'Is there anything more I can do for you?' And the weeping one thought and added, 'O, yes! I forgot to ask you if you give trading stamps.'"

THE INCORPORATION OF THE INSTITUTE.

IN our March number was published the proposed application of a charter for the American Institute for Drug Proving. Article 3 of the articles of incorporation provides that a "majority of the board of trustees shall be composed of members of the American Institute of Homœopathy." In other words,—assuming of course that the application for the incorporation of the American Institute for Drug Proving shall be granted,—an incorporated body, a body legalized as such by law, will be controlled by one that is not incorporated, and therefore legally irresponsible.

An interview with one of the gentlemen making up the first board of trustees admitted the correctness of our position in the above matter.

GLEANINGS.

THIOSINIMINE IN CICATRICAL CONDITIONS.—Klemperer, in *The British Medical Journal* of November 18, 1905, speaks favorably of the treatment of certain cicatricial conditions by thiosinimine, for example in perigastric adhesions causing pyloric obstruction or in cicatricial stenosis of the pylorus, and in hour glass stomach. He relates cases in which perigastric adhesions have disappeared, while in cicatricial stenosis the results were gratifying. It was first recommended by Hebra for lupus cicatricies. Feleký also used it in case of stricture of the esophagus, he reported three successes and one failure, he used it as an aid to dilatation. The only ill effects noticed from the use of the drug were those of temporary anorexia and depression. The method followed by all these writers is a hypodermic injection of a 10 or 15 per cent. solution about three times a week, the amount used being from a half to a whole syringe-ful. Originally alcoholic solutions were used, but these were found to be painful, and a solution in glycerine and water was found to be free from this inconvenience. The formula used by Klemperer is: Thiosinimine 10 parts; glycerine 20 parts; distilled water 70 parts.

G. MORRIS GOLDEN, M. D.

RAW MEAT IN TUBERCULOSIS.—R. W. Philip has employed raw meat alimentation with excellent results., But to be effective he states that such alimentation must be systematic and continued. The meat is usually ordered in one of three ways: 1. Pounded raw meat, slightly seasoned with salt, serve thrice daily. 2. Beef juice, either extracted by water or by means of pressure. 3. Raw meat soup, made by mixing minced meat with milk. The results of such a diet are summarized as follows: 1. The soft flabby muscles fill up and become firm, and the sense of fatigue lessens. 2. The pulse rate is lessened, and the blood pressure improved. 3. There is a rapid increase in the amount of hemaglobin in the blood, and a marked increase in the digestive leucocytosis., 4. Haemoptysis does not follow the adoption of the method. 5. The gastro-intestinal functions become more effective, and intestinal metabolism is simpler and more complete, the stools improving in character. 6. The temperature is favorably influenced, and the increase in weight, while slow is permanent. 7. local lesions are influenced favorably.—*Lancet*, December 23, 1905.

G. MORRIS GOLDEN, M. D.

THE EXPLANATION OF PULSATING EMPYEMA.—Dr. J. W. Calvert in the *American Journal of the Medical Sciences* for November, has an important paper upon this very interesting phenomena, and has brought forward an entirely new theory of the pulsation, for which he gives good reasons. He

reviews the various theories, as set forth by such men as Fraube, Frentzel, Comby, Fereal and Kussmaul, but none of their views are very satisfactory, and it is observed that in all, the pulsations are supposed to be transmitted from the heart.

While he was working upon a cross section of a body in which there was a left pleurisy the anatomical relations of the organs suggested to him the following explanation of pulsating empyema. The requirements for such pulsations are a strongly pulsating organ, distension of the pleural sac with fluid, air or solid material, and a collapsed condition of the lung. The first condition is fulfilled by the thoracic aorta; the second by the normal relation of the pleura to the thoracic aorta; the third by the presence of fluid pus, or fluid and air in the pleural sac; and fourth, by the collapsed condition of the lung in pleurisy and empyema. The thoracic aorta lies slightly to the left of the bodies of the vertebrae; below it is almost in the median line. Immediately over the aorta is the parietal pleura from the fourth or fifth rib to the diaphragm. In the normal thorax the aortic pulsations are absorbed by the compressible lung tissue, and consequently are not transmitted. Fluid in the pleural cavity compresses the lung. As it increases, the thoracic walls and mediastinum are pushed outwards from the pleural cavity. As long as the lung contains air it is capable of absorbing the aortic pulsations. Finally it becomes completely collapsed, and at the same time the fluid in the pleura increases and presses on the intercostal spaces and in consequence of its increased tension becomes capable of transmitting the aortic pulsations. The diaphragm also probably has pulsations communicated to it, but these are absorbed by the abdominal organs.

As the pulsation entirely depends on hydraulic principles, the nature of the fluid is not important. However, few cases of pulsating serous effusions have been recorded. In certain cases, when part of the fluid has been withdrawn the pulsation has been observed to cease, a fact which accords with the explanation given. In the majority of cases of pulsating empyema, the left side is affected. Examinations of transverse sections of the thorax show that the right pleura, when distended, may be pushed against the aorta. Hence the explanation of those rare cases of pulsation on the right side.—*Lancet*, January 6, 1906.

G. MORRIS GOLDEN, M. D.

TREATMENT OF SEROUS EFFUSION BY INJECTION OF ADRENALIN CHLORIDE. —Plaut and Steele in the *British Medical Journal* tell us that this method of treating serous effusions was first advocated by Barr, in 1903, who tried it in cases of malignant disease of the pleura with hemorrhagic effusion, also in other cases, both pleural and peritoneal, with almost invariable success, even in cases of pericarditis with effusion. The results obtained by Barr in cases of ascites from hepatic cirrhosis were not quite so good as those resulting from tuberculous peritonitis and malignant growth. The only cases of ascites, with one exception in which Plaut and Steele have tried adrenalin have been those due to cirrhosis of the liver, and without exception the treatment has proven successful. In the majority of cases one injection was only used, while at times two were necessary.

The method used is by means of a two-way, trocar and canula, and through the canula still in situ, one drachm of adrenolin chloride (1:1000), diluted to one-half ounce with sterile water, was introduced by means of an exploring needle. The canula was then removed, the wound closed with wool and collodion, and in abdominal cases, the abdomen was gently massaged for five minutes, and a binder firmly applied. The injections are often followed by pain. In all cases there was a rise of temperature from $\frac{1}{2}^{\circ}$ to 2° , occurring usually within a half hour; also an immediate rise in the pulse tension was noticed, lasting from a quarter to half an hour. In no case was the amount of urine altered.

The reason why adrenalin should have the effect of stopping the serous exudate seems rather doubtful. In a case of carcinoma of the liver, in which it was used to check the effusion, the patient coming to autopsy five weeks later, numerous recent adhesions were found between the visceral and parietal peritoneum. These adhesions were very exceptionally vascular, a regular network of fair-sized vessels radiating out on both sides of the adhesions. From this it is reasonable to suppose that the adrenalin, by inducing adhesions between the parietal and visceral layers of the peritoneum, and these adhesions becoming vascular, thus sets up a very fair collateral circulation, thereby relieving the congestion and so diminishing the exudate. In any case, however, the drug acts; and the injection of adrenalin chloride seems indicated in all cases of serous effusion when simple tapping does not effect a cure.

G. MORRIS GOLDEN, M. D.

DIABETIC PURPURA.—Lefcowitch reports such a case in *American Medicine* of January 20, 1906. The patient, a boy, three years of age, who had been partly breast fed and partly bottle fed during infancy, and dentition occurring at six months. The family history was negative. For past three months had a bluish eruption on various parts of body, ranging in size from a quarter to a silver dollar. There were also lesions in mucous surfaces that bled readily, the bowels were moved two to three times daily, appetite poor, and urinated eight or nine times during the day, and once at night, frequently soiling the clothing. Examination of urine revealed specific gravity 1036, no albumin, sugar present, 11 grs. to the ounce. After two months appropriate treatment, there was an absence of sugar, no nocturnal enuresis, no purpuric spots, and boy in good condition. One year later, the boy was pale and emaciated; the skin was dry and poorly nourished, sugar present, and he presented the aspect of a true diabetes, but contained no marks of purpura.

He states, according to Morfan, the causes of secondary purpura may be classified as: 1. Mechanical, traumatism. 2. Nervous. 3. Toxic, forming part of the acute infectious diseases, or a symptom in certain diseases and cachectic states, under which head diabetes is mentioned.

Indeed, he states, most writers and text books give diabetes as one of the causes of secondary purpura, but the report of such a case could not be found, hence he reports the case as showing the co-existence of these two interesting disorders of metabolism. It is also interesting to note that a true diabetes may follow an alimentary glycosuria. He further states that

it shows the importance of Morse's statement of the routine examination of the urine in infancy and childhood. Furthermore, this patient had been treated for an enuresis, and he is of the opinion, that if Morse's statement is followed out, then enuresis would vanish as a disease entity, and moreover the value of an examination of the urine in infancy and childhood, when metabolic processes are comparatively simple, cannot be overestimated.

G. MORRIS GOLDEN, M. D.

THE DUMB-BELL INTESTINAL ANASTOMOSIS.—This method of intestinal anastomosis, devised by Joseph B. Bacon, receives its name from the dumb-bell shaped device, upon which the gut is sutured. This device is a hollow cylinder of aluminum with both ends large and round, or with the lower end flattened and larger than the upper. It is made in three sizes and can be used for an end-to-end anastomosis or a lateral implantation of the bowel or a gastro-enterostomy.

In an end-to-end approximation, a tension suture is placed at the mesentery border and one directly opposite. A longitudinal incision is now made in the distal end of the intestine, unless the proximal end is enlarged, where it is then made, about two inches from the division of the gut. The tension sutures are caught by forceps and drawn through this incision. This tension causes an invagination of the two ends of the intestine into each other. The dumb-bell is now placed in the invaginated ends and a ligature, preferably of rubber, is tied tightly around it. This includes all of the layers of both parts of the intestine. The dumb-bell is disinvaginated by gentle traction and pressure, the peripheral incision is closed and the operation ended by suturing the mesenteric opening.

The technique of gastro-enterostomy differs slightly but is as easily accomplished.

The author claims the following advantages for this method: 1. Simplicity of the construction of the dumb-bell; therefore always ready. 2. Simplicity of the operation. 3. The absolute safeguard against leakage, as the ligature secures all of the connective tissue. 4. The short time in which the operation can be performed. 5. The dumb-bell cannot remain at the site of the operation for more than four or six days, as the connective tissue will all have been uniformly necrosed by that time. 6. The extremely light weight of the dumb-bell, its size and shape insures against the possibility of its lodging at any part of the alimentary tract. 7. No reinforced sutures are necessary. 8. The minimum amount of cicatricial tissue that ultimately remains.—*Journal of the American Medical Association*, January 6th, 1906.

J. D. ELLIOTT, M. D.

THE EARLY DIAGNOSIS AND RADICAL CURE OF CARCINOMA OF THE PROSTATE.—Young describes a radical operation for carcinoma of the prostate, but it is too long to glean in these columns. He has now met with fifty cases of this disease and has operated upon six of them. One died from the effects of the operation; one a year later from an operation for vesical calculus; and one, two months after operation, from nephritis. In the second case autopsy showed a slight local recurrence, but no cancerous tissue

was found in the last case after diligent search. Three patients are living and well—one ten months, one eight months, and one two months after operation. His conclusion is: Cancer of the prostate is quite a common disease, about one case in seven of prostatic enlargements in men past fifty is cancerous. It is characterized by induration—often of stony hardness, and pain is frequently present.

The early diagnosis may be made when there is marked induration, and the absence of the usual intravesically projecting lobes, as shown by the cystoscope (the prostatic orifice often appears normal). The disease is often of slow growth and remains for a long time confined within the limits of the firm prostatic capsule. The operation carried out by me in six cases is necessary if a cure is to be expected; it is not difficult of performance, and furnishes remarkably satisfactory functional results. With early diagnosis the mortality should be nil and the percentage of cures large. The general practitioner should suspect every indurated enlarged prostate and the patient should be urged to submit to a perineal operation, when, if the disease is proved to be malignant, the radical operation can be done.—*Journal of the American Medical Association*, March 10, 1906.

J. D. ELLIOTT, M. D.

SOME DIFFICULTIES OF DIAGNOSIS AND OPERATION IN DISEASES OF THE BILIARY TRACT.—An early diagnosis of gallstones is considered very important by W. P. Carr, but such a diagnosis, before the stones have passed into the ducts or have set up a cholecystitis, is exceedingly difficult. It can only be made upon the symptoms of pain and tenderness over the region of the gall-bladder, and by excluding disease of the stomach, pleura, kidney, pancreas, liver and appendix, and superficial inflammations of the abdominal wall and ribs.

By careful examination and study this can usually be done, with the exception of certain diseases of the pancreas, liver, or appendix. In these cases fortunately, the distinction is not important, provided the operator is prepared to meet whatever conditions are present. Another great difficulty, and one which sometimes renders a diagnosis impossible, is the co-existence of one of the diseases to be excluded with the gall-bladder affection. Jaundice does not occur unless there is obstruction of one of the hepatic ducts or of the common duct and is present in only about 10 per cent. of all cases of gallstone.

The greatest difficulty the author has encountered in operating upon the biliary tract is, first, the positive determination of the cause of the obstruction, and, secondly, making sure the cause is removed and the common duct patulous. As the last three-quarters of an inch of the common duct and the ampulla of Vater is imbedded in the pancreas, Carr believes that it is impossible to make sure that it does not contain a stone. And other forms of obstruction may be more difficult to detect than stone. As we can not be sure of the patency of the common duct, the gall-bladder should not be excised unless the common duct is drained; and even if the common duct is open at the time of the operation it may become obstructed at some future time in such a way that the obstruction can not be removed, and the gall-bladder will then be of great value for draining the

bile into the intestine. Several cases are related to show the impossibility of determining whether the common duct is patent.

Therefore it is only when there is malignant disease of the gall-bladder or at least suspicion of it that cholecystectomy is advisable.—*New York Medical Journal*, February 24, 1906.

J. D. ELLIOTT, M. D.

BILATERAL BLINDNESS FOLLOWING MEASLES.—Measles is apt to be complicated by inflammation of the cornea and conjunctiva, but apart from that the disease may bring about damage to vision in other and less obvious ways. A form of retrobulbar neuritis, due apparently to the toxins present in the system, may be to blame; so may nephritis which has complicated the former. In very rare cases blindness appears to have been due to a cortical lesion.

Rollet, of Blois, records the case of a girl, aet. 13, who acquired measles during an epidemic. She had the disease mildly, it ran its usual course, and she was out of doors again, having had no eye symptoms whatever. But one day she felt extremely drowsy while sitting under a tree, dropped off to sleep for a very brief period, and awoke to find herself completely blind. In the fundus the only pathological change detected was that the discs were of a strange orange-yellow hue, dull and waxy-looking. The waxy appearance was present nearly all over the fundus; only about the macula and disc itself the color was more nearly gray; the vessels were extremely small. The aspect suggested that the appearances were not all recent, they looked as though they were part of a chronic process, but no previous symptoms were admitted by the patient. The urine contained a trace of albumen, but she had no other signs suggestive of uremia. Some months later the vision remaining the same, there were further changes in the fundus suggestive of retinitis pigmentosa.—*Archives of Ophthalmol.*

WILLIAM SPENCER, M. D.

GLAUCOMA, FOLLOWING CONTUSION OF THE EYE, WITH TREATMENT.—The author's discussion of four cases of glaucoma following simple contusions of the eye, two of which occurred in his own practice and two in that of Scala, is of great practical interest. The injuries in all instances were slight. Increased tension made itself manifest between the eighth and fifteenth day following the trauma.

Noteworthy is the fact that all but one case occurred in subjects younger than those in whom glaucoma usually appears spontaneously, thus excluding the predisposition of age in three patients. The one case referred to was in a man of 57, the eye had been subjected to the influence of atropin for eight days after being struck with a whip. He advances reasons why the atropin in all probability was without influence in the production of glaucoma in this patient. Yet in the light of our present knowledge of the effect of this agent upon the eyes of subjects past middle life, we have a perfect right to question the non-effect of atropin in the production of the disease.

The theory advanced by Scala, and concurred in by the author, as to the cause of glaucoma under such conditions is that the injury, by paralyzing

the muscular coats of the blood vessels, cause the transudation of a serum rich in albumen from the vessels of the choroid, iris and ciliary bodies into the anterior chamber, giving to the aqueous humor a colloidal or gelatinous consistency, which by pressure in the angle of the anterior chamber interferes with the free drainage of the eye.

All of the above cases recovered with useful vision, two by the simple use of eserine and warm fomentations, and the other two by punctures of the anterior chamber.—Dr. A. Peters in *Jour. Eye, Ear and Throat Diseases*.

WILLIAM SPENCER, M. D.

REMOVAL OF THE LENS IN MYOPIA.—The author submits that there are three classes of myopes, for whose benefit the above operation may be considered:

1. Extreme myopes of elderly or middle age, in whom the pathologic changes do not exceed the production of conus. In these the operation is unnecessary except for particular reasons. They can usually be assured of useful V, that will outlast the remainder of their lives by properly adjusted glasses. As a rule, the danger of extraction will outweigh the benefits conferred, for these persons will be least appreciative of the improved vision that may be obtained.

2. Extreme myopes as in 1, but in whose eyes extensive pathologic changes have taken place. Here the operation is virtually contra-indicated. Only exceptional and imperative reasons should lead us to undertake it. The dangers of extraction are very great.

3. Extreme myopes between the ages of ten and twenty-five. The prophylactic value of the operation is very high, for without it the patient is almost surely doomed to be blind in middle and old age. Cautiously repeated discussions are necessary. Length of time is not to be considered in comparison with horror of destroying a healthy, useful eye in an attempt to improve V, or obviate a danger that the patient may never live to encounter. It should never be forgotten that the patient consents to such an operation without motive of any kind other than our recommendation, and the faith he reposes in us. A long interval should lapse before the fellow eye is operated upon, so that every opportunity may be afforded to judge of the degree and permanency of the result.—Dr. H. D. Bruns, *Jour. Eye, Ear and Throat Diseases*.

WILLIAM SPENCER, M. D.

INTESTINAL OBSTRUCTION.—MORRIS, (Birmingham, Ala.,) in reporting some cases showing the fate of patients affected by this serious accident, says: "I believe that if all cases of intestinal obstruction could be given the benefit of operation within the first twenty-four hours, the mortality in this condition would be completely revolutionized. The fact that some cases do exist for days and are relieved by operation leads us in cases in which there is an element of doubt, sometimes to delay surgical intervention until the chances for recovery are materially lessened. Occasionally a positive differential diagnosis is exceedingly difficult, but the conditions from which a differentiation cannot be positively made are almost in-

variably equally as imperative in their demands for surgical intervention as would be the existence of an ileus.

Among the most common of these conditions may be mentioned appendicitis, gallstones, infected gall bladder, floating kidney with twisted ureter, perforated gastric ulcer, ruptured extra-uterine pregnancy and salpingitis, all of which when giving rise to symptoms that could lead to confusion in the diagnosis of ileus would positively indicate operation. The bare possibility of a mistake in diagnosis in conditions in which no intraperitoneal operation is indicated (such as calculus passing through a ureter) should not act as too severe a restraint, for such a mistake would of necessity be most rare, and an abdominal section in such a condition could do no possible harm. Sudden severe abdominal pain should always suggest the possibility of intestinal obstruction, unless clearly due to some other cause. When associated with nausea and vomiting, and when it does not respond to moderate doses of morphia, hypodermically, the condition is still more suggestive. Sudden severe abdominal pain, associated with nausea and vomiting plus obstipation which does not respond within a few hours to potent and stimulating enemata, constitute a condition in which the indications for operation are positive. The inability to isolate a distended loop of intestine, the presence of shock and stercoraceous vomiting go to confirm the diagnosis, but should not by their absence cause undue delay in operating. As a general proposition, the more sudden and violent the storm of symptoms initiating the conditions, the more imperative the indications for early operation.—*Amer. Jr. Obs.*, Vol. LII, 769.

THEODORE J. GRAMM, M. D.

BACTERIOLOGY OF THE PUERPERAL UTERUS.—Those who have attentively watched the interesting debate which has long surged about the question of puerperal auto-infection, will doubtless be interested in a series of bacteriological examinations lately conducted at the Johns Hopkins Hospital, particularly since some results have lately been published which seemed to contradict the statement of Doderlein and others that the normal puerperal uterus was almost universally sterile, and even when it did contain bacteria that streptococci were never present. The results obtained by Little, who conducted this examination are as follows:

1. In fifty consecutive women whose lochia were examined immediately after labor and on the third and seventh day of the puerperium, the uterus was absolutely sterile in 92, 50, and 44% of the cases, respectively.
2. Counting as negative the cases in which gonococci were present, the figures are 96, 72 and 67 per cent.
3. The puerperium was normal in forty and sterile in ten. In the former, the percentage of absolute sterility were 92.5, 62.5, and 50 per cent., as compared with 90, 40 and 20 per cent. in the latter; or, counting as negative the gonorrhœal cases, the figures are 95, 85, and 70 per cent., and 100, 50, and 50 per cent., respectively.
4. The results were considered as positive when bacteria were found only in smear preparations or only in cultures, as well as when present in both. Accordingly, it is probable that a certain number of the positive

results were due to contamination, and that the uterus is really sterile in a larger proportion of cases than indicated by these figures.

5. The streptococcus was found but once in the entire series, being present in a febrile case on the third day, but absent on the first and seventh days.—*Amer. Jr. Obs.* Vol. LII, 815.

THEODORE J. GRAMM, M. D.

CLINICAL AND EXPERIMENTAL STUDY OF THE ACTION OF MERCURIC CATA-PHORESIS IN THE TREATMENT OF CANCER.—Granger. During the course of these experiments we have observed many interesting phenomena which occur by the application of currents of high amperage under anæsthesia. Most all the patients were carefully prepared for operation by administration, hypodermatically, of morphia $\frac{1}{4}$ gr. and atropine 1-120 gr.

One of the most marked effects of the current, under these conditions, was upon the pulse and respiration. In several cases the pulse was observed to drop as low as 40 per minute and respiration became labored. To avoid these disagreeable results it is suggested that the current be steady and regular, and should be turned on slowly, when the patient is in the surgical state of anæsthesia. Again it was noticed that a sudden variation of the current would at times prove beneficial to the respiration.

The effect observed at the site of application was a greyish zone of necrosed tissue, spreading in proportion to the strength of current, and extending in every case faster into diseased tissue. This greyish color may be ascribed to salts of zinc and mercury, observed with its greatest intensity at the points of electrodes. Following upon the application was almost a complete disappearance of the odor, so frequently found in these cases. These peculiar properties of the current can be termed its "selective" action.

Following the application of electric currents, the parts are swollen, ooze considerably, a line of demarcation forms, and a slough comes away. This usually is without hemorrhage. The wound heals rapidly by granulation.

The following conclusions are drawn from 24 cases:

(1). Mercuric cataphoresis offers means for the destruction of malignant growths, rendering healthy tissue sterile, and stimulating its cells to greater physiological action.

(2). There seems to be a "selective" action of the current on cancer cells.

(3). It is incapable of producing an auto-infection.

(4). The measure is practically bloodless.

(5). The results are good.

(6). The scars are soft, pliable and smooth.—*The Journal of Advanced Therapeutics*, December, 1905.

WILLIAM F. BAKER, A. M., M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY JOHN HUTCHINSON, M. D.

THIS FROM THE ECLECTIC MEDICAL JOURNAL: Old-school authorities to-day caution physicians against prescribing coal-tar remedies; they have gone decidedly out of fashion during the past five years. *The Medical Bulletin* (old school) says: "The coal-tar group of drugs bring on alarming, and even fatal results." *The Medical World* (old school) says: "It is thought by the most careful and conservative practitioners that such a dangerous depressant as Acetanilid (or other coal-tar products) should not be used at all in any stage of pneumonia, even in the first stage in plethoric subjects." Eclectics have always been careful in the use of coal-tar preparations. If Dr. Nick's pneumonia patients have recovered, he is to be congratulated, or rather his patients are to be congratulated on having survived both treatment and disease. Coal-tar preparations have gone out of fashion with the old school. Acetanilid has killed its thousands; people are dropping dead by scores in all of our towns and cities as a result of this powerful heart depressant, which is the basis of most "headache powders." Its baneful effects will be visited even upon the third generation. The sale of these preparations has dropped off so largely among physicians, because of the many deaths which have come to their notice from their use that these preparations are being advertised now directly to the laity. If you give your patient Acetanilid, and cyanosis and heart failure ensue, don't attribute death to a visitation of Providence. The consensus of opinion among the leading thinkers of all schools of medicine is that the coal-tar group of drugs are extremely dangerous, and should not be prescribed.

In the March bulletin of the Hahnemann Medical College and Hospital of Philadelphia, a class of forty-seven students discuss for their professor of Materia Medica, Dr. Mohr, the homœopathic remedy in five selected cases. The specimen papers on *Sepia*, *Silica*, *Lactuca virosa*, *Kali iod*, *Sulphur*, *Causticum*, *Hyoscyamus* and many analogues are excellent models.

PLEURISY.—*Treatment.* Aconite early; bryonia, if the symptoms do not quickly improve under aconite. These two remedies will be the most frequently indicated. Iodium may do better than bryonia in tuberculous subjects, it is also excellent in empyema. Kali carb. may be required for the

violent sticking pain. If the results of a blow or from over-exertion, arnica will probably be needed. Cantharis, apis, merc. iod. or arsenicum may be very valuable in the stage of effusion, the latter two especially where it is purulent. Rhus tox. or pulsatilla may be called for in pleurisy arising from metastasis or rheumatism. Sulphur is an excellent remedy frequently required to absorb the effusion which has become chronic. Hepar may supplant it in purulent pleurisy. Study the individual patient and prescribe the remedy indicated by the totality of the symptoms.—Walter Joel King, M. D., in *Progress*.

It should be remembered that bungling work cannot be tolerated in any phase or grade of pleuritis. A mixed therapy, too abrupt change of remedy, and above all over-dosing bring serious penalty to the case if not to the prescriber. Pleuritic inflammation is rich in sequelæ. No remedy but the indicated is safe.

RADIUM IN ŒSOPHAGEAL CANCER.—Einhorn introduces the radium vial inclosed in a hard rubber capsule which is screwed to the end of a flexible rubber tube inclosing a stylet to guide it, the latter being removed when the stricture is reached. The capsule remains *in situ* from half an hour to an hour. The instrument is easily cleansed and disinfected and can be employed also in gastric cancer. No mechanical force is employed—mechanical dilatation not being a part of the treatment. Einhorn believes that the methodical application of radium furnishes a means by which the course and seat of the disease may be favorably influenced—and at least retarded if the growth cannot be removed. It deserves, in his opinion, an extensive trial in this condition, which has thus far been intractable.—*Medical Times*.

REMARKS ON THE EXAMINATION OF PATIENTS.—A discussion of the Clinical Lectures at the Washington Homœopathic Medical Society, December 9, 1905, by George F. Laidlaw, M. D., Professor of Practice of Medicine in the New York Homœopathic Medical College and Hospital: "I do not wish to be misunderstood. I do not deny the efficacy of the homœopathic remedy. I yield to no man in my admiration for the scientific work of Samuel Hahnemann and his many followers. In my own practice I use little but the indicated remedy, but I say with a conviction born of many observations that there are many disorders affecting the human body which are mechanical or which demand surgical removal which are not at all amenable to the homœopathic or any other remedy. I say that every physician should be competent to make early and exact diagnosis of these conditions that the proper mechanical treatment may be applied. I say that the only way to save yourself from a serious mistake is to examine the patient with the clothing removed, and to decide in the first place, whether there is a mechanical disorder or a medical disorder before you take the symptoms and prescribe the indicated remedy.—*Medical Century*.

If Dr. Laidlaw stands on this platform, he is in fellowship with a goodly number of worthy men who recognize healing as the duty of the physician.

If you find a case that you cannot manage, first determine the lesions, if possible, and having done so, settle in your own mind if it is to be treated

by medicine or surgically; if the latter is indicated, proceed with all due haste and the most painstaking scrupulous care, do not delay, for delay is dangerous. If medicine is to be your weapon in the fight for life and health, choose your remedies with equal care and precision, watch closely the action of the remedies you administer, and the effect it has upon *your patient*. Never deceive yourself, never temporize, if you are "at sea" and cannot determine your bearings, measure up the symptoms by your *repertory*, study each one carefully, weigh them in the aggregate and then use the *remedy that most nearly corresponds*. Nature is a wonderful force and if left to herself will sometimes accomplish wonders. What royal physicians are we when we assist Nature? What wisdom do we exercise when we use the remedy that covers all symptoms in a given case, and how unmerciful are we when we overburden the human economy with too much and too many drugs.—*Clinical Reporter*.

AN APOMORPHIA CURE.—September 15, 1905.—Etta, age 7 years.

History:—About 8 p. m., child stumbled and fell and struck her head on the pavement, in the left Fronto-parietal region. Examination revealed no depressed bone. She managed to get home alone but was irrational. She was seen when she fell by other children who, later, reported same. Was called two hours later.

Symptoms:—Lies in stupor, does not speak or answer when spoken to;
Lies on affected side (left);
Has frequent paroxysms of wild delirium, usually every thirty minutes, worse from touch;
Eyes staring and glassy;
Looks around room as if someone were after her;
If left alone will run around room and back to bed again, with same stupor following.
The active stage is preceded by a severe retching and vomiting (cerebral) shaking the whole frame; face violently congested.
Kicks and fights when touched.
Determined attempts to tear and pull off clothing, only from the waist down;
Frequent desire to urinate. The particular feature here is that the child would ask to use the vessel.

R Apomorphia, (30x). One dose and Sac. lac., followed in two hours by a refreshing sleep of seven hours; entire recovery in morning.

Note.—The following symptoms are found recorded in Hale's "New Remedies," which were observed on animals and clinically verified in the above case, viz.: "Epileptiform convulsions brought on by touching; tetanic condition, running around and around the room, scaling walls."—J. W. Waffensmith, M. D., 2254 Wheeler Street, Cincinnati, Ohio.—*The Critique*.

SHEPARD quotes in *Eye, Ear and Throat Journal*: "ALYPINE, A NEW LOCAL ANAESTHETIC. Alpyne is primary tetra-methyldiamin-ethyl-dimethyl-benzoyl-carbinol hydrochloride. It occurs in well-formed crystals, which melt at 169° C., and, although non-hygroscopic, are very soluble in water.

The aqueous solutions are neutral, and may be sterilized by boiling over a naked flame for five or six minutes; when heated for longer in an autoclave they become slightly acid, but may be restored to neutrality with sodium bicarbonate and retain their anæsthetic properties unimpaired. Aqueous solutions of alypine keep well. Alypine is easily absorbed by the mucous membrane and the subcutaneous tissue; no inflammation or necrosis have been observed to follow the injection of 4 or 5 per cent. solutions. Its anæsthetic action is equal to that of cocain, and, in extreme dilution, greater; while it occasions neither mydriasis, vaso-constriction, nor influences the accommodation, so that it is most serviceable in ophthalmic work as a substitute for cocain. Like stovaine, its toxicity is relatively very feeble compared with that of cocain. Complete anæsthesia of the eye is obtained in sixty to sixty-five seconds by the application of a 1 or 2 per cent. solution.—E. Impens (*Apoth Zeit.*, 1905, 20, 589.)"

BOILING WATER.—Professor Charrin, of the College de France, asserts that there is no practical value in boiling water to prevent typhoid. He decries the habit of trying to destroy fever germs in the water by heat, for, at the same time, the beneficent microbes which assist in the digestion of cellulose and albumin are also destroyed. In the absence of the beneficent microbes, these undigested substances are apt to cause enteritis and other diseases. M. Page corroborates these views and states that the risk of contracting typhoid is small, and by boiling the water, although we may avoid catching the disease, we expose the organism to many other ailments equally as pernicious.—*La Tribune Medicale*.

THERAPEUTIC VALUE OF LECITHIN.—Attention has been drawn of late to the therapeutic value of lecithin, many observers having noticed a marked improvement of the blood after the remedy had been taken for some time. F. Levy has interested himself in the theoretical side of the question, and has made quite a number of analyses to determine if the metabolism of the body is really stimulated. He found that with lecithogen, a cacao containing a certain proportion of lecithin, the amount of phosphorus excreted with the urine is increased, while the percentage of nitrogen remains about the same. In impoverished blood, the remedy often does more good than iron; it shows its beneficial influence particularly in secondary anemias. The amount of lecithin contained in the various nutritive preparations on the market is generally 1 per cent., but this seems to be sufficient to bring about the desired results.—*Berl. klin. Woch.*, 1905, No. 39.—*La Tribune Medicale*.

DAVID PRESBURY BUTLER, M. D., of Rutland, Mass., says in *The New England Medical Gazette*, as to the tubercular patient: We should not try to give the open-air treatment in winter to our dying patient. A well ventilated room from 60 to 65F. seems to give the most comfort. The only exceptions I have seen have been in those cases who have taken the outdoor treatment previously and continue to demand the largest amount of fresh air possible. Oxygen will often relieve the dyspnœa that frequently just precedes death. Of the remedies prescribed homœopathically I have found the greatest help from, and used most frequently stan. iod., antim. iod., cup. arsen., colocynth, kali-bichromate, ant. tart., nux vomica, ipecac,

melilotus, and bryonia. When one has seen the suffering that may precede death in these advanced cases, there is the greatest satisfaction in knowing that we can prevent much of it.

Other physicians who have had sanatoria experience will subscribe to the foregoing and be inclined to extend the list of remedies greatly.

MERCURIUS.—All complaints worse at night, with much sweat, which does not relieve. Mumps, diphtheria, tonsillitis, etc., with great salivation; dirty, flat, unhealthy looking ulcers on tonsils, pharynx, etc.; tongue red, with dark spots, or a dirty white color.

Syphilitic rheumatism, worse nights, with much sweat about thighs, which does not relieve; gonorrhœa, greenish discharge; hæmaturia; chor-dee; phymosis; deep, unhealthy, ragged-edged sores.

Terrible racking cough, worse nights; salivation, with bad breath.

Dysenteric stools; tenesmus, worse nights; sweating does not relieve.

Clammy cold night sweats drive him out of bed.

Morning sickness, with salivation so profuse that it wets the pillow in sleep.

Complaints increased during sweating.

During every menstrual period anxiety, red tongue with dark spots, and burning, salty taste in gums; teeth set on edge.

Leucorrhœa, always worse at night; itching; burning, corroding with rawness.—*Chironian*.

SMALLPOX has been known and studied in China for more than three thousand years. They have used red applications for many centuries. They use red lotions for washing the eruptions and hang red curtains around the bed of the patient.—*Red Cross Notes*.

OF "LYCOPODIUM AS A REMEDY," P. C. Majamdar says in the *Indian Homœopathic Review*:

Recently I had the occasion to treat a bad case of dropsy, with jaundice and emaciation of the upper part of the body; and the curative power of lycopodium was exhibited in a marvelous manner. Not only this, the power of the high potencies and single dose was also remarkably noticed in this case. It was a case of an adult European who had been a victim to disordered liver for a length of time. He had symptoms of bilious colic, and his doctor diagnosed the case to be one of gall-stone. He was subjected to allopathic treatment for months without much benefit. This state of things went on for days together, though in a mitigated form.

Subsequently yellow color of the whole body, particularly of face and conjunctiva, appeared. Itching of the whole body, tympanitic distension of abdomen, thin, yellow, painless stools. Feverishness in the evening supervened, and quinine and other febrifuge medicines of the allopathic pharmacopœia had been resorted to. The disease took a chronic form, and an operative measure was advised.

My advice was sought, and I prescribed some medicine and sent it by post without seeing the patient. This had no perceptible effect. What was thought by the local allopathic doctors as tympanites of abdomen proved ultimately to be a dropsical swelling. The patient became reduced in

strength, and all hope of recovery was abandoned. When dyspnœa appeared, a paracentesis abdominis was preferred. A large quantity of straw-colored fluid was let out from the abdominal cavity, with some relief of the dyspnœa. But this amelioration as a matter of course did not last long, and the abdominal cavity was again full of fluid. Two or three times the operation of tapping was performed, and the patient was reduced in strength.

He came down and placed himself under my care. Extreme prostration and emaciation, loss of vital fluid, dyspeptic conditions—all pointed to china as the remedy. I gave it a fair trial in high potencies, and there was considerable improvement in general strength. Even the jaundiced hue was changed to some redness of face. The dropsical symptoms and the colic troubled him still.

At last lycopodium seemed to me the true simillimum, and I gave him a single dose in the 200th potency. This dose had a wonderful effect, and the fluid in the abdomen was reduced wonderfully. The liver, formerly somewhat enlarged and hard, became softened and smaller; the colic disappeared altogether. This single dose of lycopodium was followed by many doses of placebo in powder. The patient is now nearly cured.

The effect of lycopodium upon the urinary organs is very great. In renal calculi and colic I have seen decidedly beneficial effects. The severity of pain subsides as if by magic if the symptoms correspond.

I have given lycopod, a fair trial in cases of appendicitis, and here I am charmed by its curative power. A young man, otherwise healthy, though dyspeptic to a certain extent, had an attack of appendicitis. He used to have fever in the evening, when his abdomen distended with gas, constipation, urine high-colored with brick-dust sediment, pain so severe that he could not move his limbs or sit up in bed. Lycopod. cm. cured in a single dose.—*Monthly Hom. Review, London.*

INFLUENZINUM—CLINICAL OBSERVATIONS.—We have the following report from a patient—a gentleman æt 53—who is very sensitive to the action of homœopathic remedies. *Influenzinum*—a nosode made from the sputum of an influenza patient—was prescribed for extreme susceptibility to nasal catarrh. The patient making the report has had about twenty-five attacks of influenza during the last twelve years or so; and during the last three years has at times been subject to brief (usually) but violent attacks of nasal catarrh, provoked by touching anything cold, most on waking, and moving hand or arm ever so little, thus touching a cooler part of the bed, and attended by sneezing and profuse discharge of clear mucus.

Different remedies were prescribed in succession as indicated including *Influenzinum*.

The following appear to be effects of the action of *Influenzinum*. (1) The removal of the leg pains; (2) improved appearance of the throat, which is slightly relaxed and granular, and habitually rather dark red; (3) cramp in left hand, numbness in right; (4) the dreams; (5) the increase of mental vigor, *probably*. *Collinsonia* and *Natrum m.* have both produced such improvement, and it would be expected of those remedies on their indications. It is, however, noticeable that in this patient (who was cured of *prolapsus ani* of years' standing by a unit dose of *Collinsonia tinct.*), the

use of *Collin.*, *Nat. mur.*, and *influen.* has been followed by stools becoming paler; and a liver derangement, increasing his somewhat deficient supply of blood to the head, is accompanied by greater brain-power.—Arthur A. Beale, M. B., in *Homœopathic World*.

ACONITE has been neglected in modern homœopathy. A sentiment in favor of relegating the remedy to the earliest inflammatory stage, which the physician rarely sees, has obtained. This is all wrong. Recent papers on Aconite by different observers, show that a wider usage is inevitable with the homœopathist. Aconite is not only a remedy in sthenic disorder and "fear of death," it has also many and varied mental earmarks as the provings evidence; and with all grades of temperature, few diseases may require it at one time or another.

Aconite antidotes prominently Bell., Cham., Coff., Nux v., Sulphur, and secondary effects of morphine.

It follows well Arnica, Coff., Sulph., Veratr.

It is followed well by Bry., Spongia., Merc., etc.

Is complementary to many remedies.

Is applicable to conditions occasioned by abuse of remedies.

Is the "acute" of Sulphur.

Abuse of Aconite calls for Sulphur.

IT IS NOT VERY INSTRUCTIVE READING, "Regular Treatment of Pneumonia." In fact, to one who is accustomed to have ten, twenty or more doctors meet and discuss the subject of pneumonia, and not only agree on the general principles of treatment, but mention almost all the remedies to be administered, it is puzzling to note how without rule or regulation, to say nothing of regularity, these our friends are when they touch this important subject.

Yes, the homœopath knows what he is about when he administers aconite, bryonia, belladonna, phosphorus, chelidonium, sanguinaria or tartar emetic. He knows that he is not experimenting, for every homœopath, for more than a hundred years, has been using these remedies for the same indications, and every one of the many thousands of homœopathic physicians that now practice in this world would give the same remedies for the same indications and confidently expect good results.

And herein is food for thinking physicians.—The Medical Forum.

FOREIGN LITERATURE.

CONDUCTED BY E. FORNIAS, M. D.

PRESENCE OF DRUGS IN OUR HIGH DILUTIONS.—In one of the last sessions of the "Société Française D'Homœopathie," Dr. Vannier presented a valuable report on some practical means to detect the presence of medicinal substances in our metallic dilutions, which I think, is destined to create a great surprise among our materialists. In addressing his associates, Dr. Vannier firstly expressed his gratitude to M. M. Delarne and Gattiker, experienced and highly competent gentlemen in all matters relating to analysis, for the valuable aid they lent him in the execution of his work. A work, which no matter how incomplete it may appear, presents a great medical interest to those anxious to appreciate the practical and useful means of investigation and verification known. Do not expect, gentlemen, he said, to listen to a long and fastidious nomenclature of all the means the chemist and physician may possess to disclose, in a given metallic solution, the substance it should contain. In our work we could have exhausted, of course, all the methods of analysis at our command, we could have been able by multiplying our researches, act upon the solution by numerous reducing chemical agents, study it with the spectroscope, and observe the different modifications brought forward into the new disposition of the bands of the spectrum; we could have, likewise, following the investigations of Prof. Ostwald, of the University of Leipzig, inquire into the phenomena of recrystallization, which are even produced with the ninth decimal attenuation, that is, with the millionth of a gramme; and finally, utilizing the interesting observations of our teacher, Dr. Jousset, Sr., recognize the presence of certain metallic compounds, by ascertaining their effect on the vegetable cells and particularly on the *Aspergillus niger*. But we have preferred to put aside complicated chemical methods, physical proceedings, spectroscopy, recrystallization, biological processes, and apply only simple means, accessible to every one, in other words, practical. Our wishes have been to act as physicians, not as savants; we have had, true enough, to resort to chemistry, but we have made little use of it, notwithstanding the great resources it offers us. Chloride of gold, for instance, is reduced by a large number of simple bodies—hydrogen, phosphorus, arsenic, antimony, bismuth, cadmium, cobalt, iron, copper, nickel, zinc, lead, mercury, which forms an amalgam, tin, phosphorated hydrogen, arsenicated hydrogen, bioxyde of nitrogen, carbon monoxide, etc., etc. Excuse me for this display of chemical products, and permit me to explain our experiments, and the interesting results, which under many points of view, we have obtained.

We have successively studied dilutions of gold, silver, copper, mercury, zinc, iron, arsenic, bichromate of potassium and iodine. The largest num-

ber of products were insoluble in water. The three first attenuations were prepared by trituration, and we selected the salts most employed:

For gold—*Aurum muriaticum*.

For silver.—*Argentum nitricum*.

For mercury—*Mercurius corrosivus*.

For zinc.—*Zincum sulphuricum*.

For iron.—*Ferrum sulphuricum*.

The only ones studied in substance were *Arsenicum*, *Kali bichromatum* and *Iodium*.

The solutions were made with distilled boiled water, and the reagents employed were poured directly into bottles. We selected the most simple reagents which practitioners may have on hand, and could enable us to be certain in a few minutes of the existence of the prescribed remedy. The test for the high dilutions was made by adding to a given quantity of reagents the same volume of distilled water. The third centesimal dilutions which were not influenced, save by iron, served also as tests, for they remained limpid and colorless, after appropriate treatment. At the end of this report will be found a complete table of the examinations made.

CONCLUSIONS.

From the trials made, and embraced in this table, we conclude that:

1. The research of a substance, second centesimal, (a tenth of a milligramme per gramme) was always positive and distinct. Always showed a perceptible and characteristic precipitate.

(The limit of sensibility for iodine was the second centesimal.)

2. The trial with reduced second-centesimals was likewise very distinct.

3. Save with iodine, the fifth-centesimals always reacted. They exhibited a turbidness or perceptible coloration, contrasting distinctly with the limpidity kept by the third-centesimals.

4. The third-centesimals were only impressed by iron.

To sum up; we consider that for the greater part of the substances tested, the limit of sensibility to reactives, was the fifth centesimal; perhaps for some of them, the fifth centesimal half diluted.

By limit of sensibility we mean that the reagents selected clearly indicated that the solution tested did truly contain the substances looked for. For instance: If we treat the fifth and sixth centesimals of As, Zn, and Hg. with H_2S , we ascertain that the sixth centesimals remain limpid and that in the fifth centesimal a cloudiness is produced, white for Zn, yellow for As, and brown for Hg. We are certain that with the spectroscope, or other more scientific means of investigation, but also more complicated, we could have obtained some results with the higher dilutions; our desire, however, has been to employ only practical means. We expect to continue our researches, and I hope to be able to present to this society in the near future a complete work about all our dilutions.

I do not wish to insist further on the interest which these researches may offer, not so much on account of the facility with which we can verify the presence of medicinal substances in our dilution, but because we

are thus enabled, and the point is important, to show our detractors, whose bad faith is evident, the great error they commit in asserting that our dilutions do not contain medicine. They do contain medicinal substances, but in infinitesimal doses, and they can be discovered by simple means up to the third centesimal. Their presence is still revealed in the thirtieth centesimal by divers effects studied by Jousset, Nægeli, and many others. The feeble excitation, which is the consequence of their introduction into the organism, suffices to modify the evolution of diseases.

Dr. Simon and the president of the society complimented Dr. Vannier on his work, and earnestly encouraged him to continue his researches.

In the discussion that followed the presentation of this report, Dr. Cartier remarked that up to the present time it has not been possible to discover the presence of medicines in the high dilutions, 12th and 30th, but that notwithstanding this, homœopathic practitioners employed them daily with the certainty that they are efficacious. He proposed the following hypothesis: He thinks that as radium imparts to bodies with which it comes in contact, radio-activity, the medicinal substances communicate to dilutions, properties not belonging to them, and that only subsist when matters, agents of their therapeutic activity, have disappeared from the higher attenuations.

Dr. Vannier insists that Nægeli has experimentally proven that soluble metallic compounds (nitrate of silver, for instance) are able, even in the one-thousand trillionth, to destroy vegetable cells. He calls these effects oligodynamic.

Likewise, Oswald, of the University of Leipzig, has demonstrated that the phenomena of recrystallisation are produced even with the ninth decimal attenuation.

Jousset, Sr., then took the floor to state that, while Dr. Cartier was right in declaring that up to the present it has not been possible to confirm the material presence of drugs in the high dilutions (12th and 30th), he had furnished us with one more example of the incurable propensity of the human spirit for mysterious explanations. What does he mean by the virtue of a remedy which will subsist when the matter has disappeared?

First, let us leave out a matter, that no one has ever seen, and say that a medicine is a substance endowed with special properties. But all the properties of a material substance are absolutely connected with the existence of this substance. The properties of taste, color and weight cannot subsist when the body which produces them has been put out of existence. What becomes of the white of the snow, when this melts away? The medicinal properties of a drug are subjected to the same laws, and when the medicament has disappeared, its properties cannot subsist. So, then, if the therapeutic properties of a medicine are revealed by clinical observation, it is because the drug still exists, although our means of investigation are powerless to isolate it. This is the history of the invisible microbes; for in an infectious disease transmissible by the serum of the patient, the microscope cannot reveal the presence of any microbe, and yet these microbes exist, as can be demonstrated by filtering the pathogenic serum over a bougie fine enough to retain the smallest microbes, the pathogenic serum becoming then sterile.

To this, I add, that in the experiments of the salts of silver and mercury with the *Aspergillus niger*, the action of these salts decreases with the dilutions, but remains always of the same nature. It hinders, then lessens the vegetation of the fungi; it is always the same thwarting property. As this property exists up to the 30th dilution, we have concluded that the drug is present still in this infinitesimal dose.—*Revue Homœopathique Française*. November, 1905.

E. FORNIAS, M. D.

TABLE OF VANNIER'S RESEARCHES.

I. AURUM MURIATICUM (Gold).

Coloration:—The 3x still retains a yellowish shade. The other dilutions are colorless.

Reagents: Diffuse light. Sun. The change can be stirred up by oxalic acid, hot.

1st Dilution: Reduction rapid.

3rd Decimal: Reduction rapid.

2nd Dilution: Reduction rapid, slightly purple.

2nd Dilution (reduced): Reduction rapid, slightly purple.

5th Decimal: Oxidation perceptible; the liquid is distinctly violaceous.

3rd Dilution: Remains colorless.

2. ARGENTUM NITRICUM (Silver).

Coloration: Dilutions, colorless.

Reagents: 1st Natl.; 2nd Na. Br. Arseniate of soda.

1st Dilution: 1st precipitate which turns black. 2nd precipitate red.

3rd Decimal: 1st precipitate which turns black. 2nd precipitate red.

2nd Dilution: 1st greenish-blue layer. 2nd slight precipitate.

2nd Dilution (reduced): 1st greenish-blue layer. 2nd slight precipitate. Less accentuated.

5th Decimal: 1st slight bluish layer (by Na. Br.), seen over a black ground, distinct reaction. 2nd reaction perceptible.

3rd Dilution: Colorless.

3. CUPRUM SULPHURICUM (Copper).

Coloration: The 3x still retains a slight bluish shade. The other dilutions are colorless.

Reagents: Potassium ferrocyanid.

1st Dilution: Red precipitate.

3rd Decimal: Red precipitate.

2nd Dilution: Red tint, precipitate still perceptible.

2nd Dilution (reduced): Red tint, precipitate still perceptible.

5th Decimal: Rose shade, very distinct.

3rd Dilution: Colorless, turned slightly rose after a few hours.

4. MERCURIUS CORROSIVUS (Mercury).

Coloration: Dilutions, colorless.

Reagents: 1st H_2S .—Allow to pass hydrogen disulphid for 5 minutes.
2nd iodide of potassium.

1st Dilution: 1st, black precipitate. 2nd, red precipitate.

3rd Decimal: 1st, black precipitate (scarce). 2nd, red precipitate.

2nd Dilution: 1st, brown tint (precipitate after standing). 2nd, slight red precipitate.

2nd Dilution (reduced): 1st, brown tint (precipitate after standing).
2nd, slight red precipitate.

5th Decimal: 1st, slight brown shade (still distinct). 2nd, nothing.

3rd Dilution: 1st, colorless. 2nd, colorless.

5. ZINCUM SULPHURICUM (Zinc).

Coloration: Dilutions colorless.

Reagents: H_2S .—Allow to pass hydrogen disulphide for five minutes.

1st Dilution: White precipitate. Zinc sulphate.

3rd Decimal: White precipitate.

2nd Dilution: White turbidness. Precipitate on standing.

2nd Dilution (reduced): White turbidness. Precipitate on standing.

5th Decimal: Whitish cloud still perceptible,

3rd Dilution: Colorless and clear.

6. FERRUM SULPHURICUM AND MURIATICUM (Iron).

Coloration: The protosalt colorless. The persalt colored up to the 2nd dilution (reduced).

Reagents: 1st potassium ferrocyanid for the protosalts. 2nd potassium sulphocyanate for the persalts.

1st Dilution: 1st, blue (dull). 2nd, red.

3rd Decimal: 1st, dark blue. 2nd, red.

2nd Dilution: 1st, dark blue. 2nd, rose.

2nd Dilution (reduced): 1st, light blue. 2nd, rose.

5th Decimal: 1st, light blue, distinct. 2nd, very light rose.

3rd Dilution: 1st, turns bluish, perceptibly, after some time. 2nd, nothing perceptible.

7. ARSENICUM ALBUM (Arsenic).

Coloration: Dilutions colorless.

Reagents: H_2S . 100 grammes dilution,—one drop of hydrochloric acid.
Allow hydrogen disulphide to pass for five minutes.

1st Dilution: Yellow precipitate.

3rd Decimal: Yellow precipitate.

2nd Dilution: Yellow precipitate.

2nd Dilution (reduced): Yellow precipitate.

5th Decimal: Yellow shade, still distinct. Scarce deposit on standing.

3rd Dilution: Colorless and limpid.

8. KALI BICHROMICUM (Potassic Dichromate).

Coloration: Dilution colorless to the 2nd dilution. Very slight tint in the 5th decimal.

Reagents: Silver nitrate.

1st Dilution: Red precipitate.

3rd Decimal: Red precipitate.

2nd Dilution: Slight red precipitate.

2nd Dilution (reduced): Slight red precipitate.

5th Decimal: Very slight rose tint.

3rd Dilution: Nothing.

9. IODIUM (1st alcoholic dilution).

Coloration: Colored up to 3x. The rest colorless.

Reagents: Add 5cc. chloroform to dilution.

1st Dilution: Colored chloroform.

3rd Decimal: Colored chloroform.

2nd Dilution: Slight color, but still perceptible.

2nd Dilution (reduced): Colorless.

5th Decimal: Colorless.

3rd Dilution: Colorless.

10. PLUMBUM (Acetate of Lead).

Coloration: Colorless.

Reagents: Kl. H₂S. Sulphohydrate of ammonia.

1st Dilution: Kl.—yellow precipitate. H₂S.—black precipitate.

3rd Decimal: Kl.—yellow precipitate. H₂S.—black precipitate.

2nd Dilution: Kl.—yellow precipitate. H₂S.—black precipitate.

2nd Dilution (reduced): Kl.—yellow precipitate. H₂S.—black precipitate.

5th Decimal: H₂S.—brown tint.

3rd Dilution: Invisible coloration, even when the solution is concentrated. Appears when agitated.

II. STANNUM (Pure tin dissolved in water).

Coloration: Colorless.

Reagents: H₂S.

1st Dilution: H₂S. Maroon: protochloride. Yellow salt: bichloride.

3rd Decimal: H₂S. Maroon: protochloride. Yellow salt: bichloride.

2nd Dilution: H₂S. Maroon: protochloride. Yellow salt: bichloride.

2nd Dilution (reduced): H₂S. Maroon: protochloride. Yellow salt: bichloride.

5th Decimal: Not clear.

3rd Dilution: Nothing.

Revue Homœopathique Française.

E. FORNIAS, M. D.

THE HAHNEMANNIAN MONTHLY.

MAY, 1906.

CLINICAL CASES WITH COMMENT.

BY JAMES C. WOOD, A. M., M. D., CLEVELAND, O.

CASE I.—*An Incarcerated Fibroid the size of a Child's Head; causing intense Suffering because of Pressure upon Rectum, Bladder and Sacral Nerves.*—Patient aet. 54; very fleshy. Menstruation ceased at 50. From 45 to 50 bled profusely at menstrual periods. Six weeks before I saw her she had a fall from a chair, after which she suffered intensely with tenesmus of the bladder and rectum and pain down the limbs. Physical examination showed the pelvis completely occupied by a tumor the size of a child's head which was hard and immobile, being wedged into the hollow of the sacrum. It was impossible to dislodge this tumor even in the knee chest posture. Even large doses of morphine would not relieve her suffering. The pressure upon the bladder was such as to make it impossible to empty this organ without a catheter. Great difficulty was also experienced in getting the bowels to move.

On February 11, 1904, I opened the abdomen in order to dislodge the tumor from its incarcerated position in the pelvis. I had to use a corkscrew and pull it from the true pelvic cavity as one would pull a cork from a bottle. A supravaginal amputation of the uterus was made, both ovaries being removed. The abdomen was closed with two layers of catgut, silkworm-gut tension sutures and a subcuticular silkwormgut suture.

Remarks: This case shows that a uterine fibroid is not an innocent growth even though the woman has passed through

the menopause, and even though the tumor had previously caused no trouble from pressure or hemorrhage, the two chief indications for surgical interference. Indeed had the tumor been larger this accident would not have occurred. This is one of the contingencies which is liable to arise at any time in dealing with uterine fibroids. The patient made an ideal convalescence and is to-day perfectly well.

CASE II.—*Appendicitis with a Peri-Appendiceal Abscess. Drainage.—Death from infection.*—Patient aet. 18. I was called to see her in the fall of 1901, and the following history was obtained. She had suffered from an attack of appendicitis one year previously, which kept her in bed some four or five weeks, and from which she never fully recovered. After this attack she suffered from indefinite pain in the right iliac region with indigestion, constipation, mucous stools, etc. The present attack began two weeks previously to my being called, and she continued to grow worse up to the time I saw her, October 4th. The attack began with a chill, the temperature ranging from 99° to 103° F. Examination revealed a mass in the right iliac region. There was nausea, vomiting and obstinate constipation.

Operation on October 4th. The abdomen was opened close to the anterior superior spinous process and an effort was made to reach the abscess and drain it sub-peritoneally. This, however, was impossible, and the abdomen was unwittingly opened. The mass was then walled off with gauze packing and the abscess opened. A teacup full of exceedingly foul pus escaped. No effort was made to find the appendix. The pus cavity was wiped out with gauze and washed with a bichloride sponge, when it was well walled off from the abdominal cavity with fresh strips of iodoform gauze, a rubber drain being left in the center of the gauze. The wound was closed with silk-wormgut sutures around the drain, the drainage tube being held in place by means of a suture. The patient was removed from the table in fairly good shape, but died from general infection of the peritoneal cavity at the end of 48 hours. A bacteriologic examination of the pus showed mixed infection.

Remarks: This case represents a type of appendicitis with which the surgeon frequently meets. The patient had had two attacks of appendicitis and did not fully recover from the first. Had she had an intermediate operation in all probability her life would have been saved. She was not well after the first

attack and nothing short of radical work would have made her well. After the pus had formed, I think that the indications were clearly to drain the abscess without getting into the abdominal cavity, if this were possible. Unfortunately it was not possible in the case given. One will save a goodly proportion of these cases by operating after pus is formed, but the mortality is necessarily high. The surgeon of to-day does not pretend to do anything more than drain the abscess when he has pus to contend with. No effort should be made to find the appendix after pus has been found without getting into the peritoneal cavity. It is more than probable that in a large per cent. of suppurative cases the appendix has been destroyed by the supuration. It is not improbable that after the abscess is drained a fecal fistula may persist for a certain length of time. Usually a fistula thus caused will heal spontaneously. If it does not, a subsequent operation will be necessary to close it. After the abscess is healed, should there be distressing symptoms as a consequence of the appendix being left behind, further surgical work may be necessary. It is now a comparatively simple matter to deal with the sequelæ of appendicitis. After the infective period has passed, instead of a mortality of, say 25 or 50 per cent., which confronts one in dealing with acute suppurative cases, the death rate should not be greater than five per cent., and in reasonably favorable cases much less than five per cent.

CASE III.—*Divulsion for Diagnostic Purposes.*—Patient aet. 62. On October 16, 1905, she was referred to me by her attending physician because of a nasty discharge from the cervix which had persisted for a year, and which failed to yield to the ordinary treatment. She suffered no pain, but told me she had lost at least 25 pounds in flesh. So far as the physical examination was concerned, other than the discharge, there was nothing to indicate disease of the uterus. Nevertheless, the indications were clearly in a woman of this age to find out, if possible, the cause of the discharge by thoroughly exploring the uterine cavity. If upon making a curettage the endometrium is clearly cancerous, of course the entire uterus should be removed at once. The uterus was freely mobile and there were no evidences of involvement of the surrounding structures.

On the above date the uterus was thoroughly explored and the curette applied over the entire endometrium. Not enough

tissue could be obtained for diagnostic purposes, and my pathologist made a negative report. I told the patient's friends that the discharge might have been due to a sloughing polypus which had entirely disappeared at the time of the curettage; and that, should there be a return of the discharge, the thing to do would be to remove the uterus at once.

The patient returned to her home temporarily relieved, but within three weeks the discharge reappeared and has persisted up to the present time (March 26, 1906). Again she came to me and I urged immediate radical work. Naturally she dreaded this and consulted another physician. He declared the condition not to be cancerous after curetting the second time.

Remarks: This case is cited, not because of any vindication of my opinion, for I am not yet vindicated. It may be that her present physician is right and I am wrong. I hope that he is. I nevertheless unhesitatingly affirm that where a nasty uterine discharge appears in a woman who has passed the menopause and who has for years been free from uterine discharge, especially if she loses rapidly in flesh, should have her uterus thoroughly explored. Rarely does one meet with cases where enough tissue cannot be obtained for a satisfactory microscopical examination. If the hemorrhage or discharge is due to an innocent growth, or to simple fungoid degeneration of the endometrium, the curettage will stop it, and there will be an end of the case.

Even when sufficient material has been obtained by the curettage one must not accept the pathologist's report as being absolutely infallible. It is entirely possible that the disease has attacked the parenchyma of the uterus and not enough tissue will be obtained for a satisfactory microscopical examination. When, however, there is a return of the symptoms after a thorough application of the curette, and there is loss of flesh, there should be no hesitancy in removing the entire uterus and in doing most radical surgical work. I fully believe that this patient will die of carcinoma, unless indeed, something is done for her before the disease extends beyond the uterus.

To emphasize the importance of observing the rule which I have laid down I will cite the following case which has just passed under my observation: Patient aet. 44. Referred to me by Dr. Madge Golden, of Mansfield, Ohio. She had been losing flesh rapidly, had been flowing excessively and had a de-

cidedly cachectic appearance. Her skin had that dirty sallow appearance which so frequently attends carcinoma. The uterus was enlarged, but the cervix looked fairly healthy.

On March 6, 1906, the patient was anaesthetized and the uterus thoroughly explored. There was some endometritis but nothing that suggested malignancy. However, with the foregoing history, I deemed it my duty to remove the entire organ. This was done by first opening the abdomen through the anterior and posterior culs-de-sac, when the patient was put in the Trendelenburg posture and the broad ligaments tied off close to the pelvis. The vaginal wound was completely closed and all raw areas covered with peritoneum. The abdomen was closed in the usual way and the patient made an ideal convalescence. I herewith give the pathologist's report:

Macroscopic: Length of uterus three and one-half inches.

Length of fundus two and one-half inches.

Uterine wall at fundus one inch thick.

Congestion of mucous membrane of endometrium.

Ovaries both atrophic, small cysts attached to broad ligaments.

Microscopic: Slides from *cervix* show abnormal proliferation of glandular structure with tendency toward heaping up of cells lining the glands and an extension of epithelial cells beyond the limit of the glandular margin.

Slide from fundus show some glandular structure, one gland cystic. Diagnosis: Adenoma with malignant tendency.

The whole picture was one of malignancy, and yet fully developed malignancy had not taken place. One familiar with the history of uterine cancer would not, I think, for one moment doubt the wisdom of removing the entire uterus with its appendages in this case.

CASE IV.—*Pain in the Region of the Left Kidney of Reflex Origin Simulating Gastralgia and Pyo-nephrosis.*—On March 13, 1904, Mrs. B., aet. 44, Grove City Pennsylvania, came to me suffering from severe pain in the region of the left kidney, with attacks of "gastralgia." For these attacks she had been compelled to take large doses of morphine. The patient is a thin woman, and a physical examination was very easily made. The right kidney was in place and there was no evidence of organic disease of the stomach. This was determined by the fact that she could take almost any kind of food without causing the

pain. Had there been a displacement of the kidney, the pain would have been more easily accounted for. Physical examination of the pelvic organs revealed the cervix badly lacerated with marked eversion and abrasion. There was also a bad rectocele with hemorrhoids and fissure of the rectum. She complained of much pain when the bowels move. Constipation was an obstinate symptom and she had cold hands and cold feet. A careful examination of the urine showed nothing abnormal. The urine was drawn from each kidney separately. The patient was much opposed to abdominal exploration and I therefore suggested to her that we first do the minor work, permit her to return home, and should there be a recurrence of the nephralgia and gastralgia, explore the abdomen and the kidney.

Accordingly on the above date I did a divulsion, a curettage, a perineorrhaphy, dilated the rectum and removed the hemorrhoids and fissure. The patient convalesced nicely and has never had a single attack of her old pain in the stomach and kidney since the operation. In December, 1905, she reported herself perfectly well.

ANALGESIC ACTION OF RADIUM AND OF THE RADIO-ACTIVE SUBSTANCES.—

In an original contribution on the new conquests of ocular therapeutics, Darier considers radium and allied substances in relation to Ophthalmology. He states that when we make a resume of the effects produced by radium upon living creatures, under very high tensions, 100,000 U. minimum, we observe a destructive caustic, local action, the effects of which are longer in making their appearance, in inverse proportion to the time to which the patient has been exposed to its influence, and also when the patient has reached a state of full development. In the same manner the effects of radium are retarded by a less direct application, and are modified according to the nature of the envelope which is used, which may be less transparent, and more difficult to penetrate, such as lead, glass, celluloid, etc.

He refers to the various literature on this subject to show that radium is an active therapeutic agent in the removal of certain tumors of the skin, and also that it possesses analgesic properties. He also refers to his own observations in ocular neuralgia, and certain headaches were relieved by exposure to its rays. In neurotic, convulsive epilepsy, and neurasthenia he also found it of value in relieving pain. He was also able to absorb intra-ocular hemorrhage in two cases by applications of radio-active substances to the eyeball and at the temple.—Dr. A. Darier, Paris, *The Ophthalmoscope*.

CLINICAL LECTURES ON DISEASE IN OLD AGE.

BY CLARENCE BARTLETT, M. D., PHILADELPHIA

(Delivered at the Hahnemann Medical College of Phila.)

II.—TWO CASES OF MALIGNANT DISEASE: (a) OF THE OESOPHAGUS; (b) OF THE PYLORUS.

TO-DAY I have to bring before you two cases which are interesting from a diagnostic and pathological standpoint only, as little or nothing can be done for them in the way of treatment. The first patient I saw with Dr. Haerer a few days ago gives the following history:

The first case unfortunately died before I had the opportunity of showing him to you. But we have the results of an autopsy made by Dr. Sappington and I show you the specimen.

The patient was a German, a confectioner by trade. He was 62 years of age. His family history had no bearing on his present illness. His father died of gall-stone disease. The cause of his mother's death was undefined. He had one sister who died of an illness the nature of which he was ignorant.

His personal clinical history possessed but slight importance. He had always been a heavy smoker, and a moderate drinker. He never had any illness that amounted to anything, though he said that at one time he was alleged to have had "kidney disease."

His present illness began last October, at which time he noticed a beginning difficulty in swallowing. Coincident with this were choking spells, which always came on during the night. Closer questioning demonstrated that these choking spells bore no relationship to the time of the day, for they always appeared shortly after lying down, whether day or night. Both of these symptoms have been growing worse very rapidly, so that he could swallow nothing excepting liquids, and even these were swallowed with the greatest difficulty. He had a cough with scanty expectoration. His breath was foetid and tongue coated. He was greatly emaciated, and presented a very anæmic appearance. His voice was aphonic, and laryngoscopic examinations made at different times by Drs. H. S. Weaver and I. G. Shallcross showed that the left vocal cord was in the cadaveric position. A blood examination gave the following: Hæmoglobin, 84 per cent.; leucocyte count, 14,400;

red count, 5,940,000. Pulse, 88; temp. 99° F.; and respirations, 28. Physical examination in all other particulars gave negative results.

The evening before the patient's admission to the hospital, he experienced a sensation as if "something broke in his chest." This was followed by the expectoration of a large quantity of blood-stained purulent material.

My second examination was made the day of his admission, at which time he had numerous rales over both sides of the chest, but especially prominent over the left. I felt satisfied at that time that we were about to have a rapidly fatal bronchitis if not an aspiration pneumonia. The sputum examination was as follows: Tubercle bacilli negative; pneumococci numerous; many unidentified bacteria, leucocytes numerous.

Two days later the rales had entirely disappeared. Microscopic examination of the sputum was as follows: No elastic fibres; no tubercle bacilli; very numerous bacteria of various kinds, mostly unidentified; pus cells, well preserved and in great abundance.

Two days later the patient died of inanition

The history of this case is so characteristic that there was no doubt as to the diagnosis from the first. The initial symptom was a difficulty in deglutition, the disability at first relating to the swallowing of solids. Finally the patient experienced difficulty in swallowing even liquids. This told us that he had a stenosis of the œsophagus. Such a condition occurring in a man past the age of fifty without a history of a special cause for œsophageal obstruction, is almost certainly due to carcinoma. This patient died in three months and a half after the appearance of the first evidences of ill-health. Cases of œsophageal carcinoma usually run a course of from eight to fifteen months after the onset of symptoms; hence we are safe in assuming that the lesion must have been latent for some time.

Having made the diagnosis of carcinoma of the œsophagus, let us see how the remaining symptoms of the case are to be explained. The choking spells constituted the first symptom to drive the patient to a physician for relief. You have noted undoubtedly that these spells came on only when the patient lay down. The explanation of this symptom is simple. Owing to the œsophageal obstruction and his liquid diet, a certain

amount of fluid was retained in the œsophagus. As soon as the patient assumed the recumbent posture, the introitus œsophagi overflowed, fluids irritated the larynx, and the choking spells appeared.

The cough with scanty expectoration is a common accompaniment of malignant disease of the œsophagus. It may arise from one or all of four causes. When the obstruction has become fairly complete, it may be due to retention of food substances above the stricture. Not infrequently, it is dependent upon an associated bronchitis. The most distressing cases are those in which there has been established a fistulous communication between the œsophagus and the trachea or a bronchus. In the latter cases, particles of food escape into the respiratory tract and cause violent paroxysms of coughing, and may eventually produce an aspiration pneumonia. A cough of laryngeal type appears when the tumor is situated near the larynx. In this case, there was undoubtedly for a time, a bronchitis, and this accounts in part for the cough. At the autopsy there was discovered a fistulous tract between the œsophagus and the trachea. It was sufficiently large to admit an ordinary probe. There was no evidence to prove that any of the substances swallowed had entered the respiratory tract.

The aphonia and paralysis of the left vocal cord is a very common accompaniment of the disease. It is due to the involvement of the left recurrent laryngeal nerve by the growth.

In our case there was no evidence of disturbance of the functions of the pneumogastric nerves. It is well to bear in mind, however, that such are present in some cases. The symptoms included under this head are dyspnœa and rapid or irregular action of the heart. The presence of these symptoms may make the diagnosis of cancer of the œsophagus obscure, as tending to suggest the existence of a mediastinal growth. Hitzig, a German clinician, has reported the presence of inequality of the pupils in six out of thirty-seven cases studied by him. He attributes the symptom to an involvement of the sympathetic. Others regard its explanation as doubtful, but think it well to bear in mind its diagnostic importance.

The phenomena exhibited the night before the patient's admission to the hospital next demand our attention. You will recall that the notes stated "he experienced a sensation as if something broke in his chest. This was followed by the ex-

peccoration of a large quantity of blood-stained material." In view of the presence of large, moist rales diffused over both sides of the chest, but especially marked on the left side, discovered by me on the following morning, I assumed that there had taken place a perforation with discharge of œsophageal contents into the respiratory tract. The microscopic examination of the sputum disclosing the presence of numerous pneumococci further led me to believe that a pneumonia was about to be manifested. But strange to say, these signs all cleared up within twenty-four to thirty-six hours. The microscopic examination of the sputum made forty-eight hours after the first one evidently did not contain the pneumococci, at least in any great numbers. The pathologist stating that "there were very numerous bacteria of various kinds, mostly unidentified." The autopsy showed no lesions of the respiratory tract.

The anæmia present in this case was unquestionable. The merest tyro could have recognized it at once; and yet note the result of the blood examination: "Hæmoglobin, 84 per cent; leucocyte count, 14,400; red count, 5,940,000." I cannot discredit this result, because it was made by one of our pathologists, whose accuracy of observation is unquestionable. It therefore remains for me to analyze and explain it. You will note that the hæmoglobin was diminished by 16 per cent., while the red blood corpuscles were increased by practically 20 per cent. There was also a leucocytosis. The latter is the common condition in carcinoma. But how explain the high red count. You must bear in mind that a blood count relates only to the number of red cells in a cubic millimetre of blood. It gives us no conception of the total number of erythrocytes in the circulation. I take it that there was dehydration of the blood by reason of the insufficient ingestion of food and drink; and this accounts for the good showing of the blood examination in the face of a severe objective anæmia.

At the autopsy, a carcinoma which I now exhibit to you was found involving the lower portion of the upper third of the œsophagus. There were no secondary involvements of other organs.

Quite naturally, you ask what is to be done by way of treatment when one diagnoses carcinoma of the œsophagus? A cure is out of the question. All we can do is to adopt measures that will prolong life, and make existence as bearable as

possible. I am aware that some have made astonishing claims for the results of their medication. Quite recently, I came in contact with a case which had been going from bad to worse under the treatment of the physician who had, for many years been the family adviser. A change was decided upon. Within a few days, there was a most remarkable relief of the œsophageal stenosis, and this was attributed to the change of treatment; and yet a more absurd conclusion could not have been reached. The ulceration of the tumor had led to a casting off of a portion of the growth, and with it came a partial restoration of the calibre of the œsophagus. It was simply an incident in the fatal march of the lesion.

When the upper portion of the œsophagus is involved, excision has been performed successfully, and patients have lived for a long time in comfort; but such cases are decidedly in the minority.

One of the important indications is the preservation of the calibre of the œsophagus in order that the patient may be nourished. In the early stages of the disease there can be no question that the systematic use of bougies may preserve the patency of the tube for some time. Such practice is open to the theoretical objection of increasing the local irritation and exposing the patient to the danger of perforation. Ziemssen and Zenker with an experience of fifteen cases do not regard this objection as a valid one, and assert most positively that benefit follows the systematic and skilful use of the tube for feeding purposes. They claim never to have seen perforation to result. It certainly seems to me that if surgical intervention is refused, the choice between the evils of early starvation and the chances of perforation, lies in the acceptance of the latter.

Some success has been attained by the use of Symond's tube. This is practically an intubation of the stricture. The instrument employed consists of a short tube with a flange at its upper extremity, which rests upon the upper limits of the stricture thus maintaining the instrument in place. It is important that threads be attached so that the tube can be removed when indications call for this procedure. When ulceration has caused a fistulous communication between the œsophagus and the air passages, it is essential that the tube employed shall be sufficiently long to extend well beyond the limits of the pa-

thological process; otherwise food and drink will almost certainly escape into the respiratory tract and produce an aspiration pneumonia and eventually gangrene of the lungs. This accident did occur in a case treated in the hospital several years ago. Such a precaution can, however, delay the necessarily fatal issue for but a short time, for with such ulceration present, pus and necrotic tissue will ultimately bring about the same state of affairs as would the food.

The operative procedure that offers the best prospects of relief is gastrostomy. Some authorities assert that it should be performed early, and instance the great relief and prolongation of life afforded patients with cancer of the rectum treated by the making of an artificial anus. While expressing my appreciation of the value of gastrostomy, I must dissent from the hopeful views entertained by the surgeons, because the two cases cited are not parallel, for the growth in carcinoma gulæ is not unlikely to invade very important structures and end life even before complete stenosis has taken place. In carcinoma of the rectum, there are no vital structures adjoining, so that extension of the growth is not an immediate danger. It certainly seems that gastrostomy is a humane procedure for a time at least, as it averts death by thirst and starvation. Experience bearing on this subject does not teach us as much as we would like, for we cannot draw correct conclusions from cases in which the operation has been delayed an unjustifiable length of time, as is usually the case. If an operation is refused or is regarded as inadvisable, the most that we can do when the stricture becomes impervious is to feed the patient by the rectum and quench thirst by hypodermoclysis.

Special symptoms must be treated on general therapeutic principles.

Before proceeding with the next case, I will say something concerning the possibilities of mistaken diagnosis in suspected carcinoma of the œsophagus. My experience relates to two instances, both sent to me by professional friends in the belief that they were cases of paralytic dysphagia. One of the patients was an aged man who never recovered good power of deglutition succeeding an ordinary hemiplegic seizure. The important clinical fact relating to the difficult deglutition was this: A couple of months succeeding the onset of the hemiplegia, the patient began to lose the power of swallowing solids;

next the ability to take pultaceous foods was lost; and finally, there remained at the time I saw him, an ability to swallow fluids only. I diagnosed organic stenosis of the œsophagus, probably carcinomatous, and referred the case to Dr. Van Lennep for further examination. He concurred in my opinion, but advised against gastrostomy, as likely to prove fatal in view of the complications of the œsophageal disease. Another case was that of a child, who was alleged to have had a post-scarlatinal paralytic dysphagia. Here again the impediment in swallowing commenced by a difficulty in taking solids, which had to be made finer and finer; then the power of taking soft foods was lost; and when I saw her she could take liquids only. There were absolutely no signs of a paralysis of any of the cranial or spinal nerves, and I had no knowledge of a post-scarlatinal paralysis. The child moreover had, as I now recall the case, a deep suppuration in the neck, and to this I attributed the stenosis. This case subsequently came into the hands of Dr. Northrop, who performed a gastrostomy with brilliant results.

Paralytic dysphagia, you must remember, takes an entirely different course from that of stenosis. The patient usually finds that there is less difficulty in swallowing large portions of food. Deglutition is aided by taking of fresh mouthfuls. Liquids are liable to be regurgitated. Deglutition is attended by well defined gurgling sounds. The passage of the sound is readily effected. It is almost impossible for a paralysis to be limited to the œsophagus, when one bears in mind the lesions capable of giving rise to it. They include disease of the pneumogastric nerves, hæmorrhage, tumors of the medulla and pons, and localized softening and sclerosis of these regions. Œsophageal paralysis has also been observed as one of the symptoms of multiple sclerosis, tabes dorsalis, and paresis. It may be due to neuritis succeeding diphtheria or dependent upon lead poisoning or excessive alcoholic indulgence.

Our second case is that of an old gentleman, aged 80 years, an American by birth, a saloon-keeper by occupation. He was admitted to the Hahnemann Hospital on January 21, 1906. The following history was obtained:

Family History.—Father and mother died of causes unknown to him. He has two brothers living and well; three brothers died of unknown causes. He has two sisters living

and well. He denies the existence of cancer in any of the branches of his family.

Personal History.—He had the usual illnesses of childhood. Otherwise he has always enjoyed good health. He has been a moderate user of alcohol and tobacco.

History of the Present Illness.—During the early part of last August, he noticed vomiting, which always took place some time after eating. The vomited matters were dark and had a bitter taste. They never contained what appeared to be blood. The vomiting has gradually increased in frequency and severity until at the present time, he is able to retain no food whatever. His bowels are regular; his appetite is fair. His tongue is very much coated. Considering his age, to say nothing of the long duration of the vomiting, the patient is remarkably well nourished.

When the patient was first admitted, my physical examination demonstrated the presence of a hard tumor, manifested readily by inspection and palpation, and situated below the region of the gall-bladder. I was also enabled by reason of the thinness of the gastric walls to outline the stomach by palpation, and thus to prove conclusively that we were dealing with a dilated stomach. Under the circumstances, I felt justified in making a diagnosis of carcinoma of the pylorus. It was suggested that the case might be one of tumor of the gall bladder, but to this I could not assent, because it occupied too low a position, and moreover, percussion demonstrated an area of tympany between it and the lower margin of the liver. The tumor was remarkably movable, it being possible by manipulation to bring it across the median line of the abdomen.

The treatment instituted was liquid diet, and cadmium sulph. internally. This failing, arsenic was administered. No treatment was of much avail. The vomiting continued, though to a less degree than before admission.

No examination of the stomach contents has been made, because I saw no necessity for it in view of the positiveness of the diagnostic data. The patient was a very old man, and his arteries are bad. The passage of the tube in such subjects must not be undertaken lightly. I have no doubt that washing out of the stomach would relieve the vomiting. As strong an advocate as I am of lavage in carcinoma of the pylorus, I am diffident about using it in the aged. I have had one death with-

out any explanation forthcoming at the autopsy, and others have been equally unfortunate. I have preferred, therefore, to treat the patient by medicines and diet alone.

The patient has been very fortunate in not having any pain. This might throw a doubt on the diagnosis of carcinoma. But it is well known that carcinoma of the stomach is frequently unattended by pain. A tumor of the pylorus with dilatation of the stomach is exceedingly unlikely to be anything else than carcinomatous at this patient's time of life.

NOTE.—This case followed an uneventful course, the vomiting letting up somewhat. On the morning of February 4th, 1906, he died. His death at this early date was unexpected, for he had, as was stated above, maintained a fair degree of nutrition and strength. Death was due to circulatory failure, the first symptoms of which did not appear until late the evening of the 3d. The autopsy demonstrated the presence of carcinoma of the pylorus.

NATRUM MURIATICUM.—(V. B. Cosby, M. D., in *The Clinical Reporter*): Natr. mur. is a great nervous remedy; chorea; jerking of the right side of the head; after fright or grief (Ignatia must be thought of first when grief follows a bereavement). If this grief has gone on for about a month; patient has not been sleeping well during that time, becoming tired, exhausted, feverish, nervous, restless—catarrh states are threatening—mucous membrane is secreting a thick mucous, here Natrum mur. comes in. (Ignatia and Apis are the acute remedies of Natr. mur., Ign. corresponding most frequently to hysterical conditions.) Dreams vivid; thinks there are robbers in the house, and will not believe the contrary until search is made. In some complaints the heat of the stove is unbearable, especially headaches and eruptions upon the skin. Also from the heat of the sun and in summer. Inclination for open air. Wants to be washed in cold water. Chill at 11 and 12 A. M.—10 A. M. is the common time. Seldom produces chill in the afternoon. Thirst during all stages. Heat with increased headache and thirst (intermittents) with unconsciousness and obscuration of sight. Sweat relieves headache and other pains. (In Eupatorium, sweat relieves everything, except the headache which is made worse).

It is not useful in acute intermittents. The patient must have gone through a chronic state of debility to bring about a Natr. mur. chill. If the chill is caused by some recent disturbance, shorter acting remedies will cure. Itching and pricking of the skin; large red blotches, itching violently; stinging rash over the whole body. Chlorosis and blood boils; cracking and bleeding of the skin, with exudation of white, watery secretion (Natr. Sulph). Natr. mur., antidotes, Nitrate of Silver, quinine and bee-stings; is complementary to Apis, and is followed by Sepia. Sepia is one of the grand finishing remedies. It is often indicated to finish a chronic case.

**PHIMOSIS AND ADHERENT HOOD OF THE CLITORIS—THEIR EFFECTS
ON CHILDREN AND METHODS OF TREATMENT.**

BY SIDNEY F. WILCOX, M. D., NEW YORK CITY.

(Read Before the New York State Homœopathic Medical Society, February, 1906.)

It is a trite saying, but none the less true that the profoundest mental impressions are those made in early life, because at that period the mind is in its most receptive stage. A child is a thing of impulses and emotions, with undeveloped conscience and reasoning powers. To it, the things which seem pleasing are the things to be indulged in, while the things which are unpleasant are to be avoided or gotten rid of. It is not a question as to whether a certain act is right or wrong, but simply as to its desirability or undesirability. Ultimate effects are not considered by the child. It wants what it wants at once, regardless of future cost.

If, in the effort to get rid of something irritating, a pleasant sensation is evoked, it will not be long, if the irritation persists, before the impulse to produce the agreeable sensation becomes the primary object, while getting rid of the irritation, is secondary or only acts suggestively, and all this may occur without any knowledge on the part of the child that it is doing wrong. Constant and prolonged irritation may be worse in its effects than an occasional severe injury, and may produce more lasting results on the disposition, health, and character of the child.

Masturbation as a habit in children may be induced as a result of local irritation, and the practice, which is begun innocently, may be most difficult to overcome. In this article it will be understood that I am speaking only of physical causes, confining myself entirely to the conditions of the sexual organs known as phimosis in the male and adherent hood of the clitoris in the female.

In both cases the symptoms result from adhesion of the covering mucous membrane to the surface of the gland, and the retention of masses of smegma between them.

I do not propose to dwell on the appalling ignorance of many parents, or the carelessness of some physicians who neglect to

examine for the cause of the symptoms or who allow it to remain unremedied.

Perhaps the best way to bring out the gravity of the condition will be to cite a few cases which have come under my own observation.

One day a woman came into my office carrying a boy about eight months old. He was screaming as though he was in a most violent temper. "Can't you do something for this child?" she asked. "He has been like this ever since he was born." I found that he was suffering from an aggravated form of phimosis. He was circumcised, and the day following the mother told me that he had slept all night for the first time in his life.

A young boy who was moody, abnormally sensitive and morbidly conscientious, became normal and like other boys after circumcision.

Within the last week I circumcised a youth of seventeen whose preputial orifice would only admit of the passage of a small probe. The prepuce ballooned every time he urinated and gave him a great deal of annoyance. Since the operation he has told me that it is a positive pleasure to urinate.

Many other boys have suffered from preputial inflammation, herpes-preputialis, as well as from many symptoms of nervous irritability—sleeplessness, enuresis and local itching and irritation. I have known professionally two men who have died past middle age from cancer of the penis. In neither of these cases had the prepuce ever been retracted.

One of these men was well known to the public, and his intimate relations with more than one woman were matters of common scandal. When I saw him in consultation there was a disgusting sero-purulent discharge oozing from the prepuce and he was obliged to keep the penis wrapped in handkerchiefs. I advised operation, but he refused it at the time, although it was done later, but too late to save him.

I believe that the local irritation had much to do with provoking morbid sexual desire.

In female children various nervous symptoms are attributable to adherent hood of the clitoris.

A little girl of four years of age used to awaken every night with violent fits of screaming, which were quite uncontrollable. On examination I found that the hood of the clitoris was tightly adherent to the gland. The night after it was freed by the

method which I shall detail later, she woke up, but did not scream, and only asked for a drink of water. Since then she has been quite normal.

Two little girls in one family, one of six years and the other three years of age, were noticed rubbing the genitals, which were very red and irritated. The clitoris and its hood were closely adhered in both cases. Careful watching, correction by the mother and nurses had no effect in stopping the habit, and the elder became a very persistent liar regarding it. Freeing the hood gave a good result, although in one of the children there was a partial relapse after a few months, when it was discovered that there was some readhesion. A short time ago a young girl of seventeen was brought to me by a lady physician. The girl was exceedingly nervous, the uterus was retroverted, one ovary was inflamed and enlarged, and the hood of the clitoris tightly adherent. She had owned up to being a confirmed masturbator and had contemplated suicide. In this case I cut away the hood of the clitoris, performed ventral fixation of the uterus and removed the diseased ovary. The result has been a complete cure.

There is no use in multiplying evidence. The symptoms vary in character and intensity in different cases, and all the physician needs to do to ascertain the cause is to make an examination. The next thing is to relieve the patient by proper operative methods. Fussing with medicines, constant washing of the organs and retraction of the prepuce only serve to attract the child's attention to it, while simply stretching the foreskin in the male or breaking up the adhesion in the female are soon followed by relapse.

In boys circumcision only will be of any use, and in my opinion it is better to employ the "ounce of prevention" by doing the operation in babyhood. In fact, if possible, I circumcise all male children, where I attend the mother in confinement, on the eighth day. It hardly seems necessary for me to describe an operation so well known as that of circumcision, so I will give only a few points which I have found of value.

If the operation is done during the first few days of the child's life, no anæsthetic is required. If allowed to suck on a lump of sugar wrapped up in a piece of gauze, the child will hardly notice the operation. At this period of life sensibility is low, and there seems to be little or no pain. When older, a

few whiffs of chloroform are generally sufficient. If the patient is not more than a month old, sutures are hardly necessary, although one or two fine catgut sutures may appear useful. In older children either catgut or silk are generally required.

As a dressing I find a narrow strip of iodoform gauze wound three or four times around the penis to act well. The ends should be fastened to the skin over the pubes with flexible collodion, and the folds of gauze around the penis fastened together with one or two little patches of collodion. The collodion should not be put on all around the organ, for fear of causing constriction. This dressing may be left in place for four or five days, and then the child allowed to sit in a bath until it soaks off, when the wound will generally be found to be healed.

In fat babies care should be observed not to cut the skin too short. It is better to leave it long enough to roll forward just over the corona. Careful approximation of the raphe on the lower side of the penis to the frenum should be made, and the frenum should not be cut short.

DEHOODING THE CLITORIS.

This operation is not done as frequently as circumcision, but if physicians were more observing and more careful in making examinations of nervous or so-called "cantankerous" little girls, it would be much more frequently performed, and much needless suffering avoided.

The ordinary method of separating the hood from the clitoris and then trying to prevent readhesion by tucking in bits of gauze, applying ointments, etc., have proved quite unsatisfactory. Therefore I was led to devise the operation described below, which has been employed with excellent results in a good many cases. General anæsthesia should be used in every operation of dehooding. The operation is very painful and it is cruel to subject a delicate little girl to the pain and nervous shock. Cocaine is of no use.

OPERATION.

The adhesions are broken up with a blunt instrument—never a sharp one. Frequently hard masses of smegma will be found imbedded in the mucous membrane, and they are often removed with difficulty.

To keep the mucus surface separated, a piece of sterilized rubber tissue, which is not old enough to be brittle, is backed by a little roll of iodoform gauze. A strand of horse-hair, with a needle on each end, is passed through the gauze and tissue as shown in the diagram. (Fig.

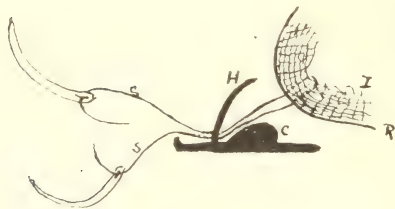


Figure 1.

C Clitoris
H Hood
R Rubber tissue
I Iodoform gauze
S Horsehair Stitch



Figure 2.

K Knot in horse hair
Stitch tied over
fold of Gauze
above hood.

1.) The gauze is used simply to prevent the suture cutting through the rubber tissue. The hood of the clitoris is held up with a pair of forceps while the needles are passed through the hood at the base of the gland, about one-third of an inch apart. The ends are then tied over a fold of gauze in a single bow knot. (Fig. 2.) As the threads are pulled up the rubber tissue is drawn down between the clitoris and its hood, thus effectually separating them for as long a time as the operator thinks necessary. The smooth rubber is unirritating, and it does not stick to the tissues like gauze, and allows the mucous membrane to return to a normal condition in which readhesion is not likely to occur.

I generally keep the rubber in place for a week, but I think ten days would be better where there is no irritation from the stitch.

Of course the child must be kept quiet and the parts carefully cleansed. After the removal of the rubber tissue, frequent inspections should be made, to see if there is any tendency to relapse.

Remarkable results have followed this simple operation in some of my cases, and I have reason to feel well satisfied with it. On the other hand, it has occurred to me that complete removal of the hood in many cases might be less bothersome and quite as satisfactory.

A CASE OF ADDISON'S DISEASE.

BY WM. A. HANAN, M. D., READING, PA.

THE "Gleanings" section of the December HAHNEMANNIAN contains the report of a case of Addison's disease treated by Byrom Bramwell, who placed his greatest reliance upon the open air treatment, yet, at the same time did not neglect the internal administration of supra-renal extract.

Remarkable improvement followed this combined treatment; although not specifically stated, yet the impression given by the report leads to the inference that in the mind of Byrom Bramwell the open air treatment was credited with having done the greater good.

Shortly before this I had under my care a typical case of Addison's disease that resisted all my efforts to overcome the progressive hypotension of the arterial system of blood vessels. He lived in a small town 15 miles from Reading, and attended the dispensary connected with the Homœopathic Hospital of Reading.

He visited the institution every second week, and during one of these visits he came under my notice. I suggested that he enter the hospital for more careful examination and the observation of the effects of the treatment. This he consented to do.

Nicholas J., aged 29 years, a laborer of Boyertown, Pa., was admitted to the Reading Homœopathic Hospital September 2nd, 1905. Although a Caucasian, yet he was a very dark colored man, the contrast between his gleaming sclerotics and his dark visage being very striking. His skin was the color of dark walnut wood. He applied to the dispensary service for relief from an over-powering weakness that prevented any sustained activity on his part.

Nothing in his family history shed any light on his present condition. He had been subject to rather frequent epileptoid spells during the first twelve years of his life, but they ceased at this age and he has had none since. One year ago he consulted a physician about a supposed jaundice that seemed to be developing; this was the beginning of the pigmentation and it distinctly preceded the asthenia. He worked during the winter and spring, but then had to discontinue his occupation (that of a laborer) on account of the increasing weakness. He vis-

ited a relative in Wilmington in July, and while there consulted a physician about this strange weakness; he was told he had heart disease and advised to go home. After reaching home he came to our dispensary for treatment.

His father is living and well; his mother died but a few months before of "dropsy;" he has two brothers and two sisters, all living and well. He claims to have had rheumatism in 1897, but on being questioned, he does not give a clear clinical history of articular rheumatism. He had measles six years ago, but recovered without any bronchial catarrh as a sequel; this is mentioned because measles is charged with rousing tuberculous processes from latency, or to adopt a phraseology more in keeping with modern ideas, because measles may remove the normal individual resistance of the tissues to tuberculous invasion.

He was 5 feet, 7 inches in height, and weighed 135 pounds. Subjectively, he complained of vertigo when standing, less marked when sitting, but none on stooping; also weakness due to muscular asthenia, which prevented him from doing any sustained work. He said his initial strength on attempting to do any work was fair, but that he had absolutely no staying powers, and in consequence speedily had to desist. The day before entering the hospital he assisted in picking apples in the orchard; as long as he was in the stooping position his vertigo did not annoy him. He also has had frequent attacks of syncope. His appetite was fair; he had no spells of vomiting, no pain in the epigastrium nor attacks of diarrhoea. Naturally the most noticeable symptom was the walnut wood color of his skin. His hair was dark brown in color, but he claimed that his complexion was fair and light colored; his father certainly had a light complexion.

The pigmentation was general, involving the whole body, and, as before stated, was the first noticeable symptom, occurring before the asthenia. This pigmentation was most intense in the face and those areas of the skin where there is a natural tendency to pigmentation, nipples, anterior axillary folds, scrotum and penis. His vaccination scars were pigmented, and the skin over the most prominent vertebral spinous processes was more heavily pigmented than the surrounding skin. The vermillion border of both lips was pigmented and the inner surfaces of the cheeks along the line of the teeth were also pig-

mented. The top of the arch of the hard palate had areas of pigmentation, but there were no spots of pigmentation on the tongue. The lachrymal caruncles in both eyes were also pigmented. Physical examination of the thorax revealed depressed supra and infra-clavicular regions, most marked on the left side. The percussion note over the left apex was slightly elevated in pitch anteriorly and posteriorly and the expiratory murmur in this apex was prolonged. There was no cough and no expectoration that could be examined. There was a soft systolic apical murmur. The first sound was perceptibly weak and the force of the impact against the chest wall so feeble that the apical contact point could not be made out. The pulse was 112, and compressible. Using Stanton's sphygmomanometer (8 centimeter cuff) I found the arterial pulse obliterated at 95 m.m. Hg. The blood count resulted as follows—erythrocytes 4,830,000 per cubic m.m.; leucocytes 14,600, hæmoglobin, estimated with Dare's hæmoglobinometer, 90 per cent.; the punctured ear lobes bled freely and required some compression before the bleeding ceased, an unusual event in work of this kind. The urinary examination resulted negatively. There was no tenderness over the supra-renal regions when sharp pressure was employed.

He was regarded as a typical case of Addison's disease; that is, some disease of the supra-renal glands holding in abeyance their internal secretion. The findings in the pulmonary apices coupled with the knowledge that the most frequent cause of this interference with the functional activity of the supra-renal glands is their tuberculous degeneration led us to regard the supra-renal lesion in this case as probably tuberculosis. He had no epigastric distress nor disturbance of the stomach or bowels; consequently there was no reason to think that the semilunar ganglion or its branches were involved in an associated sclerosis or neuritis. His symptoms were to be explained only by assuming that a condition of hypotonus of the general muscular and vascular systems obtained; the low arterial tension, 95 m.m. Hg., was repeatedly verified; the pressure observations were made while the patient was sitting, and this pressure, 95 m.m., is 20 m.m. below the average for adults of his age, 115 m.m. The blood counts certainly demonstrated that the mitral systolic murmur was not hæmic in character. It must have been the result of roughening of the valve segments or

the result of inherent weakness of the auriculo-ventricular sphincter muscle, causing imperfect closure of this orifice and consequent leakage.

He was allowed to follow his inclinations in the ward, and for two weeks passed his time sitting, reading and occasionally strolling about the ward and solarium. On September 15th, 13 days after admission his weakness increased to such an extent that to be comfortable he had to keep to the recumbent posture, but outside of occasional vomiting and attacks of nausea he made no complaint. He never got out of bed. On the 23rd of September he had an attack of severe epigastric pain with vomiting; when this was relieved he complained of great weakness, begging some relief from the overwhelming prostration which, he intuitively felt, was lethal. In a few hours he became collapsed, from which the most energetic hypodermic stimulation failed to rouse him. From the time of his admission until he took to his bed from ingravescient asthenia he was kept on tablets of dessicated supra-renal tissue (Armour), first taking one tablet every 8 hours, then increasing to two tablets every sixth hour, and eventually we gave two tablets every fourth hour. He was given a generous diet.

As before stated, on admission his blood pressure was 95 m. m. Hg.; it soon sank to 85 m.m., and then fluctuated between 85 and 90 m.m. Even when the blood pressure was taken 15 and 30 minutes after the ingestion of the supra-renal tablets it was never elevated in the slightest degree by this remedy. Curious to note the effect of ergot in its supposed elevating influence on blood pressure, I had the fld. ext. of ergot administered in drachm doses t. i. d. for three days; the sphygmomanometer, however, failed to show any influence whatever on blood pressure. He was then placed on Iodide of Arsenic 3xtrit. and Strych. sulph. gr. 1-30, alternated every third hour. While taking these drugs the final collapse came. This was quite unexpected to me. I saw him 48 hours before and there were no unusual symptoms. Unfortunately I did not get the opportunity to take his blood pressure in the interval between the attack of gastralgia and the final collapse—an interval of two or three hours.

Autopsy six hours after death. Left supra-renal gland reduced to a small nodule, consisting of a cheesy mass of degenerating material. Right supra-renal gland enlarged, forming

a projecting tumor easily noticeable when looking at the right kidney *in situ*; this projecting mass was caseating material. Left pulmonary apex contained a number of hard nodules the size of big peas and easily felt; they were grayish white on section and not advanced to the stage of caseous degeneration. Right pulmonary apex was similarly involved, but to a lesser degree. Heart was small and the valvular structures *were not* damaged. The systolic apical murmur, was, therefore, accidental.

Remarks: I am led to report this case of Addison's disease because this ailment is less commonly met with in America than in other countries. Osler, in the last edition of his "Practice of Medicine," states that but seventeen cases have come under his observation. *A priori* reasoning in this case would suggest the probability of success following treatment with supra-renal extract. As long as inadequacy of the supra-renal bodies only is the lesion to combat, before the sympathetic plexuses are involved, success, for a time at least should attend the ingestion of supra-renal tissue. But the dosage employed was absolutely ineffective in producing a measurable degree of increased tension of the arterial system. Neither was the muscular asthenia benefitted. The increasing doses of supra-renal tissue were used in the hope of rivalling the results obtained in a case of Addison's disease reported in the *Lancet* of August 19th, 1905. This case was detailed for the purpose of demonstrating that, in some cases at least, good results can be obtained in rebellious cases by increasing the doses of supra-renal tissue. Osler recommends giving the equivalent of 45 grains of fresh supra-renal substance. My patient was given daily, for a time, the equivalent of 90 grains. My case, then, does not lend support to the contention of Byrom Bramwell, that those cases which improve on supra-renal feeding are those in which the organic changes are restricted to the supra-renal organs, while the rebellious cases are complicated with the added lesion of involvement of the sympathetic plexuses.

I think this man was unfortunate in being deprived of the out-of-door life he led prior to entering the hospital. While I am not inclined to think that the treatment resorted to was directly harmful, yet the pernicious effect of confinement indoors on tuberculous subjects was not without some influence on the rapid increase in the lethal tendency of his illness.

REPORT OF A CASE OF LARYNGEAL ULCERATION SIMULATING EPITHELIOMA.

FRANK B. SEITZ, M. D., BUFFALO, N. Y.

At present, the claim to have cured cancer subjects the claimant to severe criticism as to mistaken diagnosis or open quackery, while the accurate diagnostician who discovers and effects a cure of incipient tuberculosis is lauded most highly. Can we not apply the same rule to cancer? Can we not recognize that there must be an incipient, even embryonic stage, which we can, should and must be able to diagnose with our present advantages? I do not claim to have cured an epithelioma, but herewith report a case which every laryngologist will recognize would soon, if not already, have developed into one.

Mr. W., age 55, bookkeeper, complained of a burning lancinating pain in the larynx, extending into the ear more or less constant. If no actual pain, there was uneasiness and discomfort. He frequently spit up particles of scab, often followed by red blood, and his voice would break into a falsetto. He had been treated by a general practitioner for sometime without relief.

Examination. In the left nostril there was a spur pressing tightly against the lower turbinate and was exquisitely sensitive. The uvula was elongated and rested on the tongue. The anterior one-third of the left vocal cord was denuded of epithelium and its edge was serrated.

Pathology. Here in the nose was the cause of the man's trouble. The spur had grown by pressure, as does a bunion, and become more tight and more sensitive by growth and pressure. An acrid burning discharge flowed from the points of contact, dropping into the pharynx and larynx, irritating the uvula, which became elongated by constant flapping and whipping from hawking, and the vocal cords had become denuded of epithelium by the discharge forming what Grunwald aptly terms "erosion ulcers."

Diagnosis. Spur on septum, elongated uvula and erosion ulcer of vocal cord.

Treatment was purely surgical. The spur was sawn off, the uvula amputated and larynx treated with Argyrol 3%.

Course. In four weeks all wounds had healed, nose no

longer sensitive, no hawking to clear the throat, not a particle of pain at any time, voice firm, and cord healed smooth, white and normal.

In conclusion, there are no doubt many who can cite similar cases, but this case was so clear, had baffled a good prescriber, was of the cancer age—55—and had the characteristic constant lancinating pain and ulcer of carcinoma that I feel assured that this report will help put the cure of cancer in its proper place like that of tuberculosis, and that is in its incipency.

THAT URIC ACID QUESTION AGAIN.

BY H. M. GAY, M. D., PHILADELPHIA, PA.

It seems as though the old yet evergreen subject of this paper is destined to be a perpetual bone of contention, but until the cause of the symptom-complex, which we call lithæmia or uric-acidemia is settled, there is nothing to be done but observe, compare and discuss—if necessary, *ad nauseam*.

The medical profession at the present time, is divided on this subject into two camps, the first consisting of those who believe with Haig that lithæmia is the result of the failure of the system to properly oxidize its nitrogenous waste, that this waste matter, consisting principally of uric acid and allied products, not being as readily cast off by the kidneys as is urea, which is a more perfect oxidation product of cellular metabolism, remains in the blood, or is deposited in the various tissues to cause sub-acute rheumatism, myalgia, asthma, eczema, gravel, urticaria, etc.

The rest of the profession insist that Haig's theory does not cover the ground, and that we must look further for the cause of the symptoms. It is not the purpose of this paper to attempt any lengthy discussion, owing to lack of time, but rather to present the more salient points with some illustrative cases.

The two first objections to the Haig proposition are these: First, lithæmic symptoms are not due to uric acid in the blood and tissues, because uric acid may be ingested in quite large amounts for a considerable time without harm to the system and without increasing the amount in the urine, or lowering

the alkalinity of the blood. Also, patients suffering from lithæmic attacks do not always show uric-aciduria constantly. Secondly, if lithæmia is caused by uric-acidæmia, the uric acid is not in the system as the result of hypo-metabolism, but from some other cause.

Curiously enough, we sometimes find these two somewhat diverse opinions held by the same individual, witness the exquisitely artistic article in the HAHNEMANNIAN last May by our own Dr. F. Mortimer Lawrence, in which he annihilates the Haig scheme in toto, as Dooley says "wid wan blow," while with the next breath issues the astounding statement that the uric acid in these patients, tacitly acknowledging its harmful presence, does not come from sub-oxidation of nitrogenous ingesta, but from a destruction of leucocytes in the blood, such destruction being usually associated with acute bacterial infection or intestinal putrefaction.

In other words, given a patient who cannot be argued out of lithæmia and in whom a recent bacterial infection can be excluded, the duty of the doctor is very plain, viz., cure the sufferer with a few large doses of salol, and let him go about his business. Could anything be more simple? If he still refuses to be cured, follow Dogberry's famous advice, "Let him go, and thank God you are rid of a knave."

The chief arguments in favor of Haig's theory are these, that whatever the cause of the various lesions may be, it acts like some substance deposited *in loco* by the blood. The sudden onset, the rapid changes in location, the sudden alleviation at times, and the exacerbation upon a fall in barometric pressure, all tend to this view of the case.

Again, while lithæmic sufferers may not show uric-aciduria during their attacks, ameliorations are almost invariably associated with the passage of enormous quantities of uric acid crystals or amorphous urates. Lastly, that lack of exercise and indulgence in concentrated food does predispose to this condition, irrespective of intestinal putrefaction.

I present the following cases:

CASE I.—Mrs. P., about forty years of age, has been lithæmic all her life, suffered continuously for over two years with sciatica, during which time she never was without pain and extreme soreness from hip to ankle, who suffered many

things of many doctors, including an osteopath, Dr. Clarence Bartlett and myself, who was relieved completely and entirely between two days upon the onset of a profuse, watery diarrhoea which lasted for three days, and which was replaced by a terrific attack of asthma, which in turn, inside of one week, was replaced by a myalgia of the lumbar muscles.

CASE II.—Miss S., aet. 22, had always lived in the country, and had been perfectly well until she took a situation in the city, in which she took no exercise, changed her dietary, *eating an excessive quantity of meat*, in short, changing her whole mode of life, who consulted me suffering from rapid loss of weight, extreme susceptibility to colds, persistent sore throat, decreased elimination of urea, periodic uric-aciduria, even albumenuria at times. Afterwards she developed a cough, with attacks of asthma. I lost track of her for some months. Be it understood that I had been treating her all this time on the uric acid basis, of which she had become weary, I suppose. Finally, she returned to me, no better, and received the same treatment. During an exacerbation of the cough and asthma, her symptoms left in one day, and were replaced by a myalgia of the muscles of the back and side. She crept into my office one evening, badly drawn over to one side, her face distorted with pain, yet happy withal, as she could bear the pain better than the asthma. At the present time she is practically well, her attacks being infrequent and not severe.

CASE III. Miss B. W. aet. 35. Mother suffered for many years from rheumatic gout. Miss W. has gouty nodules in her fingers. She is saleswoman in a retail candy store on Chestnut street, and for several years ate candy "all the time," and took no exercise out of doors. She suddenly developed an irritative cough, which was racking and persistent, but which was not associated with any lesion in bronchi or lungs. The cough lasted for six weeks in spite of all treatment, palliative or otherwise,—her friends and relatives all predicted her early demise, and she was discouraged herself.

This cough was relieved completely and permanently upon the onset of an acute but non-inflammatory rheumatism of both feet.

These three cases have been under my personal observation for from three to six years. The phenomena related have been

repeated in varying degrees several times; they have all been treated alike and are all improved. I would add that they have *not* suffered from acute infections, nor do they exhibit intestinal putrefaction. In fact they all have good intestinal digestion, except Miss S., who suffers slightly from constipation.

The consideration of this vexed question does not hinge upon whether or not the toxic or irritating substance causing the symptoms of lithæmia is uric acid or some other allied substance of which uric acid is an index. That the elimination of uric acid bears some definite relationship to these morbid processes, needs no demonstration. The vital point is this: Are we dealing with hypometabolism, or intestinal putrefaction, with consequent destruction of leucocytes? The latter theory is to my mind, the veriest moonshine, and may be disposed of in two self-answering questions. First, if intestinal putrefaction causes all these symptoms, *where is it?* Intestinal putrefaction, in my experience, causes very definite symptoms, and they are *not* necessarily found in lithæmic patients. Second, if the uric acid eliminated by these patients in such large quantities, is derived from the nuclein of destroyed leucocytes, would we not find a compensatory leucocytosis present? A simple statement of this question answers it in the negative.

On the other hand, we may accept the theory of Haig in so far as he allots to hypometabolism the role of chief cause of lithæmia. This view of the question gives us a simple and reasonable basis for treatment, and what is even more to the point, brings results.

THE INFLUENCE OF CAFFEINE ON THE FIELD OF VISION IN QUININ AMBLYOPIA.—The author reports a very curious case in which in from 15 to 16 minutes after drinking a fairly strong cup of tea or coffee the field of vision, already much contracted as a result of quinine poisoning, would undergo a further contraction, almost to the point of fixation, and then would return to its previous limits in about the same length of time. No permanent injury to the vision had resulted from the use of coffee at the end of the year.—Dr. Gustave Schwabe, Leipsic, *Annals of Ophthalmol.*

ROUTINE RECTAL EXAMINATION.

BY C. ALBERT BIGLER, JR., M. D.

(Read before the Homœopathic Medical Society of the County of Philadelphia)

THE importance of a local examination in all patients with symptoms referable to the anus and rectum; the ways and means that every physician has in following out his teachings in this respect and the simple manner in which it can be accomplished, has been gone over so thoroughly by proctologists, that, to say anything further on the subject may appear unnecessary and merely a repetition, but the mistake of simply prescribing without the semblance of an examination still continues, notwithstanding the voluminous literature on the subject. It was through such an error which recently came to my notice that I was led to select this topic, and I know of no better way to make this point clear in your minds than to cite the following case:

In the latter part of January, a patient, male, age forty, called to see me for an examination of his rectum. His bowels had always been regular until six days previously when he became constipated and while at the "shrine of Cloacus," so expressed by a recent writer, during a violent muscular effort to unload the bowel, he had a sensation that something had given way in the anal orifice, followed by an acute pain, lancinating in character, shooting through the rectum posteriorly to the spine. Feeling the parts, he noticed a swelling in the region of the pain, minute at first, but in a couple of hours it had assumed the size of a chestnut, with more pain and throbbing. The following morning, alarmed at his condition, he consulted a physician, who, after hearing the symptoms described above, without making an examination, prescribed an ointment with instructions to apply it freely to the parts and to return in a few days if not relieved. Three days of agony had elapsed, the patient instead of recovering, grew worse, the swelling, in the meantime, steadily increased and the sufferer, unable to move about, sent for his physician, who simply prescribed the same ointment and gave an anodyne without any examination. Twenty-four hours later there was a discharge of pus from the rectum, a decrease in the size of the swelling, with much relief

of pain, but a most unfortunate outcome. It was at this advanced stage when I first saw the case. An examination revealed an enlargement in the left posterior quadrant about one and one-half inches from the anus, extending up into the rectum, with an opening between the two sphincters.

Under general anæsthesia, the cavity was opened, pus and broken down blood clots were evacuated, after which the sphincter muscles were thoroughly divulsed and then the external sphincter was divided. From this time on until his complete recovery, seven weeks, he was relieved of all pain.

The diagnosis from the onset to the termination was as follows: One of the peri-anal veins had ruptured through muscular strain at stool causing an extravasation of blood into the connective tissue, known as a thrombotic hæmorrhoid. This blood clot had become infected, the pyogenic organisms having gained entrance to this congenial medium through the glands of the skin, hair follicles, or from the adjacent bowel. It was thus transformed into a marginal abscess of the sub-muco-cutaneous variety and the pus burrowing in the line of least resistance broke through the weakest point, between the two sphincters resulting in a blind internal fistula.

Had this patient been examined the diagnosis must have been self-evident and had the clot been turned out through a simple incision, he would have had immediate relief of pain, no infection could have followed and a complete cure effected within three or four days.

Diseases of the rectum and anus have a tendency to progress rapidly and a routine examination necessary for a correct diagnosis will oftentimes prevent much suffering, the dangers of sepsis, incontinence from extensive burrowing of fistulous tracts involving the sphincters, and the actual loss of life.

The alimentary canal, from the sigmoid flexure down, is perhaps subject to disease more than any other portion of the body. Often the onset is insidious, but once started the advance is rapid, thus necessitating an early examination. Rectal patients are not infrequently permitted to make their own diagnosis, which, in nearly every instance, is "PILES," while examination may show anything from a simple fissure to an inoperable cancer.

Occasionally a patient, usually a female, through false modesty, will not permit an examination. To such, the physician

should positively refuse treatment. Physicians will sometimes assert that they have not the proper facilities necessary for an examination, but this is a mistake. A lounge, or even a common board table about five feet long, and three feet wide will answer every purpose of the regulation chair or table.

The position generally used and the one most desirable for office work is the left lateral, also known as Sims's position. This can be used for all examinations and is the least embarrassing to the patient. Should the subject be a stout one, with the anus retracted and obscured by the large folds of the buttocks, it may be necessary to use the exaggerated lithotomy position. Remove or loosen all constricting clothing that would have a tendency to force the small intestine into the pelvis, or prevent its rising toward the diaphragm. Cover the patient with a sheet, exposing only the parts to be examined. With a good light, be it natural or artificial, the buttocks should be gently separated, giving a full view of the entire region outside the anal canal.

Palpation is important. In this way indurations or painful areas that indicate abscess and inflammation can be elicited. Also tracts of sinuses can often be followed throughout their entire extent without the use of a probe. This instrument causes much pain and is misleading when introduced into tortuous channels.

The next step is to examine the anal canal. This is accomplished by forcible separation of the buttocks, at the same time having the patient bear down. This everts the mucous membrane, bringing into view any pathological conditions.

For examination within the rectum, the finger, if educated, is of greater value than any instrument devised. With few exceptions diseases of the lower four inches of the bowel, or that part which is prone to most disease can be diagnosed by this means, likewise adjacent organs can be explored. The right index finger should be used to examine the posterior wall and the left, the anterior wall, so that the whole rectum may be felt with the palmar surface of the finger. They should be well anointed with some lubricant, perhaps the best for this purpose is sterilized vaseline put up in tubes. By a boring motion, the finger is slowly introduced, first upward and forward until the internal sphincter muscle is passed and then backward into the ampulla of the rectum. By having the patient

bear down, the finger's reach can be increased about one-half inch.

The instrument used for examination of the rectum is the speculum. There are a number to choose from, but the ordinary Sims's speculum is the only one necessary for a simple examination. This should be well lubricated and carefully introduced in the same manner as described for the finger.

In conclusion, let me repeat the words of an able author: "A rectal case, under your observation and treatment, that is neither benefited nor cured, is a walking advertisement against you."

NOTES ON MATERIA MEDICA.

BY MALCOLM E. DOUGLASS, M. D., BALTIMORE, MD.

CINCHONA (*Continued.*)

Characteristic Symptoms:

Headache as if the skull would burst, the brain beats in waves against the skull.

 Ringing in the ears.

 No desire for eating or drinking.

 Abdomen tympanitic.

 Fermentation in abdomen from eating fruit.

 Sensation as if the garters were too tight, and leg would become stiff and go to sleep.

 Legs feel as after great fatigue from a long journey.

 Great debility; sensitiveness of the nervous system; special senses too acute; very sensitive to pain; to draughts of air.

 Excessive sensitiveness of all the nerves; with a morbid sensation of general weakness.

 Body sore all over.

 Yellow color of the skin; jaundice.

 Perspiration very profuse and debilitating; especially at night.

 Profuse sweat during sleep, or on being covered up.

 Perspiration on the side on which he lies.

General Analysis.—A study of all the provings of cinchona develops that cinchona acts upon the ganglionic nervous sys-

tem, more especially upon that portion which presides over the functions of vegetation, producing a condition of general depression and exhaustion, diminishing the vital turgor, and modifying the digestive functions. The quantity and quality of the blood are altered. It becomes thin and watery, the circulation lacks energy, and as a consequence we have general debility and erethism, while various functional disturbances are manifest, such as hemorrhage, profuse sweat and urine, and watery diarrhoea, etc. In the vegetative sphere cinchona shows a special affinity for the liver and spleen, and here may be said to exist its most important relations. In the liver it produces hyperæmia and congestion, prostrating all functional performance, and giving rise to a long train of biliary symptoms, of which jaundice is one of great importance. In the spleen it also produces hyperemia, which tends to congestion and finally to enlargement of the organ.

Through the ganglionic nervous system, and in connection with the disturbances of the system above set forth, cinchona has a fever-producing power in an eminent degree, the latter almost invariably partaking of that character which in disease would indicate a malarial origin, periodicity being one of its most essential features.

The chief characteristic of cinchona is an excessive sensitiveness of the nervous system, all symptoms being aggravated by the slightest contact, by motion, and by physical or mental effort. Also prostration, with neither thirst nor hunger.

In Farrington's *Mat. Med.* there is found an excellent article on the therapeutic effects of cinchona.

It has been determined that a solution of quinine of one part to 10,000 acts destructively on infusoria. Thus it will destroy the poisons that propagate many of the contagious diseases, as puerperal fever, scarlatina, etc. The use you may make of this property is this:

When going from one case of puerperal disease to another, you may bathe your hair and whiskers in a solution of quinine in bay-rum. This will destroy all danger of carrying contagion and will not prove a source of annoyance to yourselves. On the contrary, it will aid the growth of the hair and beard.

Hahnemann has taught us that the anemia, which the cinchona causes renders it useful only when debility or anemia

comes from loss of fluids. In the allopathic school it is used in all forms of debility, given either alone or in combination with iron or sherry wine. But, as I have said before, we have learned from Hahnemann that it is only useful in the anemia which results from loss of fluids. Hence, we may use it for the results of hemorrhage, whether it be from the mouth, lungs or uterus. You may use it when long-lasting diarrhœa has exhausted the patient. It may even be used when the condition has proceeded further than a simple debility, and that horrible disease known as hydrocephaloid has developed.

In such cases, when cinchona is the remedy, the child has these symptoms: After violent or long-lasting cholera infantum, it becomes drowsy, the pupils may be quite large, the breathing is very rapid and superficial; the diarrhœa may have ceased, or the movements may be involuntary; the surface of the body is rather cool, especially the prominent features about the face; thus, the ears, nose and chin are cold. In just such cases as this, cinchona will, if there is any vitality remaining, restore the patient to health.

If it should fail, you may still fall back on *Calc. phos.*, a similar but more deeply-acting drug.

In applying cinchona to the debility resulting from sexual excesses, remember, that it is only curative for the debility resulting from the excessive loss of semen. If there are constitutional troubles it is worse than useless.

You may use cinchona for hemorrhages, and here you can scarcely do without the drug. The hemorrhage may come from any orifice of the body; the blood is apt to be dark and clotted; the flow is so profuse as to have almost produced exsanguification of the body; there is coldness of the face, in fact, of the whole body, and the features are collapsed; there is gasping for breath; the patient demands to be fanned. Now, this fanning is desired, not for the purpose of cooling the patient, but is called for because of the instinctive demand for more oxygen, which the fanning produces by changing the strata of air inhaled.

Cinchona is frequently called for in ante- and post-partum hemorrhages; in such cases you do not give it in a single dose, but repeatedly, at short intervals, until the consequences of the hemorrhage have been removed.

There is another condition in which I would recommend cin-

chona, and that is when retained placenta is attended by hemorrhage. *Puls.* does no good. It has been recommended in these cases to take away the after-birth by manual interference, and I usually adopt this plan, giving cinchona internally, and holding the uterus in my hand, through the abdominal walls until firm contraction has taken place.

After reaction has been established after hemorrhage, you may still give cinchona if there is headache, with violent throbbing of the carotid arteries. This is not a Bell. symptom. It is here an indication of anæmia, whereas, under Bell., this symptom is indicative of hyperæmia.

It is a general characteristic of this remedy to produce a nervous erethism with its symptoms of debility. The mind is over-active, though lacking endurance. Ideas crowd on the mind in unwelcome profusion, preventing sleep. On closing the eyes he sees persons and figures. The surface of the body is sensitive to touch. This susceptibility is more imaginary than real. If he has a slight pain he feels it unbearably, and he dreads the slightest attempt to approach him lest you touch him.

You may have to use cinchona to cure asthenopia, but only when it occurs as the result of hemorrhage or loss of fluids. An examination with the ophthalmoscope shows the disk to be pale and anæmic. The pupils are apt to be dilated; the eyes ache on attempting to use them, as in reading or writing, and objects blur.

We now come to the study of the action of cinchona on the digestive organs. It is very useful for dyspepsia occurring especially after loss of fluids. Digestion is so weak that the stomach cannot tolerate any food at all. Should the patient's supper come to him later than usual, he is sure to suffer in consequence.

The stomach is distended with flatus, but belching relieves only momentarily. The least food or drink taken increases this symptom, so that he feels full after taking but a small quantity, as though he had eaten an enormous meal. He complains often after eating of a sensation as of a lump in mid-sternum, as though food were lying there. This is situated higher up than is the "hard-boiled egg" sensation of *Abies nigra*.

Puls. also has the same sensation in the same locality. This state, when cinchona is the remedy, is often the result of the

loss of fluids, drinking tea to excess, and beers, fruits, etc. The appetite is often voracious when not capricious; thirst for cold water; drinks little and often.

You may also use cinchona in the gastric troubles of children who are continually asking for dainties. Substantial kinds of food they will not touch. On awakening in the morning they are cross and irritable. They have a bad taste in the mouth and a white-coated tongue.

Cinchona is useful in some diseases of the bowels, especially when associated with marked tympany. The abdomen is enormously distended; when you percuss it, it gives forth a sound almost like that from striking the tense head of a drum. It is particularly when this tympany occurs early in the disease, that cinchona does good; then this symptom shows early debility.

The diarrhœa of cinchona is very characteristic. The stool is lenteric in character. It is either worse at night or after eating. This is attended with rapid exhaustion and emaciation. In appearance the stools may be yellow, watery or brown and very offensive. Cinchona is one of our best remedies for diarrhœa occurring in hot weather after eating fruits.

Cinchona is a valuable remedy in the treatment of chills and fever, particularly for that form of intermittent fever which arises from marsh miasm. It is useful either in fevers of the tertian or of the quartan type. The chill and heat are usually unaccompanied by thirst, but there is thirst either before or after the chill. During the chill the patient sits as near as possible to the fire or wraps himself up warmly in blankets; but the *warmth thus obtained does him no good*. The chill is followed by long-lasting heat, during which the patient desires to uncover. He is then usually without thirst. His face is fiery red, and he is often delirious. The sweat which follows is profuse and debilitating. The apyrexia is by no means free from symptoms. The face is sallow, dingy yellow, from bilious complications, the spleen is enlarged, aching sore feeling in the splenic region, and total loss of appetite or canine hunger. The feet become cedematous often from disturbance in the composition of the blood, but mostly from interference in the hepatic and splenic circulations. Sleep is greatly disturbed, and the patient, so soon as he closes the eyes, sees figures, etc., before him.

Cinchona is also of essential service in the treatment of hec-

tic types of fever, such types of fever as indicate a long-lasting suppurative process. The surgeon is called upon to employ this drug very frequently when, after emptying an abscess, symptoms of hectic fever develop. The cheeks are red. The patient is excessively nervous, the nervous irritability being greatly disproportionate to the patient's strength. He is so greatly prostrated by the fever that he can scarcely raise his head. Diarrhœa adds to his weakness. Copious night sweats also exhaust him.

Another form of suppurative trouble in which you may use cinchona is in suppuration of the lungs, particularly in drunkards, when the trouble is associated with hectic fever.

You may also be called upon to use cinchona in disorganized states, either of the external tissues or of the lung substance; in the case of the latter, being indicated by the hectic symptoms and by the fœtid breath.

Do not confound the fœtid breath just mentioned with that arising from certain forms of bronchitis, in which the sputum is retained a long time and undergoes decomposition in the lungs. While the patient is breathing quietly you can notice no extraordinary odor. As soon as he gives a deep cough the breath becomes horribly offensive. This kind of cough calls for capicum, and, perhaps next in importance, for *sanguinaria canadensis*.

You will find cinchona often indicated in inflammatory rheumatism, not in the beginning of the disease, but later when the fever has become intermittent in its character. The joints still remain swollen. The characteristic pains in these cases are jerking and pressing. The patient will not permit you to approach, crying out with pain if you touch the affected parts, so exquisitely sensitive is the surface.

Cinchona is also a neuralgic remedy. It is especially suited to neuralgia of the infra-orbital nerve on either side when the symptoms are typical in their return, and when the slightest touch or draught of cold air makes the patient worse. If the neuralgia is of malarial origin cinchona is increasingly indicated.

In jaundice you should use cinchona when the surface of the body and the sclerotica are yellowish. The liver is swollen and sensitive to the touch, and there is a feeling in the right hypochondrium as of subcutaneous ulceration. The stools are

whitish, and are accompanied by foetid flatus, or else there is diarrhoea. It is especially indicated in jaundice arising from sexual excesses, from loss of animal fluids, from abuse of alcohol, and from gastro-duodenal catarrh.

CACTUS GRANDIFLORUS.

Physiological Action.—This remedy increases the musculo-motor energy of the heart, elevates arterial tension, increasing the height and force of the pulse wave. This is accomplished by increased heart action, stimulation of the vaso-motor center, and stimulation of the spinal-motor centers, increasing their activity and improving the general nerve tone. It is the heart tonic *par excellence*, as it produces stimulation from actually increased nerve tone, through improved nutrition of the entire nervous and muscular structure of the heart. It produces no irritation of the heart muscles like strophanthus, or gastric irritation or cumulation like digitalis.

Cactus exercises a direct influence over the sympathetic nervous system, regulating its action, restoring normal action, whatever the perversion. It acts directly upon the cardiac plexus, regulating the functional activity of the heart.

Investigations have proven that it increases the contractile power and energy of the heart muscle through the intercardiac ganglia and accelerator nerves.

Specific Symptomatology.—An irregular pulse, feebleness of the heart's action, dyspnoea, weight, oppression in the chest, violence of the heart's action depending upon atonicity or enervation, and a sensation of a constriction or band around the heart or around the chest, are the direct indications for its use in heart troubles. There is one symptom produced by this drug, which is produced by no other drug, namely: "Heart disease, with œdema of *left* hand only."

Therapeutic Action.—This agent is prescribed where the heart muscle is enfeebled, where there is progressive valvular insufficiency, with irregular or intermittent pulse. It is valuable in mitral or aortic regurgitation from whatever cause.

It is an exceedingly useful agent in functional irregularity of the heart, however evidenced, if due to gastric irritation, as the agent in doses of from one to three minims, soothes gastric irritability and imparts tone and improved function, in wide contrast to digitalis, which irritates the stomach.

Those who have used all the heart remedies unite in the belief that for breadth of action, for specific directness, for reliability and smoothness and general trustworthiness, cactus takes preference over all the rest. Its influence is admirable where indicated and it is invaluable in many cases. Other remedies in some cases will do as much in single lines, but none will do more, and none will exercise all of its desirable influences.

Cactus may be said to be a true nerve tonic and restorative. It improves the nutrition of the brain by improving the circulation in that organ. In this it is of advantage in some cases of *neurasthenia*, especially in those in which there is a sensation of a band or cord around the body or chest or head, a symptom often spoken of in nervous exhaustion, and in forms of *paralysis*. Where feebleness is the cause of *nervous excitement*, cactus exercises a nerve sedative influence. In oppressive *headache* in the top of the head, causing nervousness, common to ladies at the menopause, resulting from irritation in the pelvic organs, or congestion, or menorrhagia with excessive losses of blood, it is of benefit.

Where there is increased arterial tension, and exaltation of nerve force and excess of strength in the cardiac action, cactus is contraindicated. This is true in prescribing it for heart disease and palpitation.

It is given in *endocarditis* and in *pericarditis* following exhausting diseases as sequelæ, with the most gratifying results.

In valvular incompetency due to muscular weakness, in the feeble heart action following *pneumonia*, typhoid, and other severe and prostrating diseases, and in the functional heart disorder, and even organic weakness, following the use of *cigarettes* in boys, and that following *masturbation* and the use of alcohol, and the overstrained *bicycle heart*, there is no remedy which will supersede it in efficient action. In the feeble heart of exophthalmic *goitre*, it will do all that is expected of *strophanthus*.

CALADIUM.

This remedy has not been sufficiently proven to enable us to arrive at a definite conclusion as to its properties. I have used the caladium in the following cases with marked success:

Inflammation of Stomach, with fluttering as of a bird, tolerates only warm drinks, *stomach feels full of dry food*, with acrid vomiting.

Pruritis of the vulva. Crampy pains in the uterus after midnight.

Constriction of larynx and trachea, impeding deep breathing, the attacks of cough seem to originate above larynx.

Anxious groans and moans in sleep.

CANNABIS INDICA.

Physiological Action.—Observations and experiments upon animals with regard to the influence of hemp appear to indicate that carnivorous creatures suffer a kind of intoxication. Herbivorous ones, on the contrary, seem to be unaffected by it, although the dose administered has been considerable.

In man, when subjected to the operation of this drug, the pulse in some instances becomes quickened, though not remarkably so, and the respiration somewhat slower; in other cases no change is observable. At the same time there is a sensation of warmth in every part of the body excepting the feet, which, ordinarily, seem cold by contrast. It is said also to increase the appetite for food. The secretions do not appear to be materially affected. It does not cause dryness of the tongue, nor is there any constipation of the bowels.

Should the individual taking cannabis be of a temperament favorable to its peculiar action, there is very generally an agreeable exhilaration of the spirits, followed, more or less, by stupor and sleep. At times there is a delightful state of revery; agreeable beyond description. But the next day there are sensations of dulness and heaviness, which are anything but enviable. Because of the exhilarating effects, the natives of India are in some parts addicted to the use of it as a pleasant inebriant. It is certain, however, that in other countries the peculiar energy of the plant is not manifested in the same degree, nor to the same extent, nor always in the same manner; whence it is justly inferred that climatic and ethnological considerations have both to be taken into account in estimating the absolute powers of cannabis. Instead of agreeable sensations, it would seem that with certain individuals the effects are sometimes nausea, vomiting, and oppressive thirst.

Cases are known where it has induced a kind of catalepsy. Indian hemp is said likewise to act as an aphrodisiac.

The medicinal properties of cannabis, strictly so-called, are well summed up by Dr. Glendinning, who employed this drug extensively. "It acts as a hypnotic increasing sleep; as an anodyne in lulling irritation; as an antispasmodic, removing languor and anxiety, also in raising the pulse and enlivening the spirits, without any drawback or deduction of indirect or incidental inconvenience; conciliating tranquil repose without causing nausea, constipation, or other signs or effect of indigestion, without headache or stupor."

The old school recommends its use in the following:

Indian hemp is employed in medicine as an antispasmodic and anodyne in *traumatic tetanus*. Several cases are recorded which were treated with the extract, all of which were cured. They give as much as 2 to 3 grs. of the resin, once, twice, or even thrice in the twenty-four hours.

Uterine hemorrhage, such as occurs at the period of the cessation of the menses, is often moderately arrested or abated by the use of cannabis. They give for this purpose 5 to 15 or 20 drops of the tincture three times in the day, and claim excellent results.

Uterine contraction during labor. Dr. Christison claims for cannabis a power of promoting contraction equal to that which is possessed by ergot. He states that the effects are perceived more quickly than those of ergot, and that they are more energetic but of shorter duration. He adds that these effects are far from certain to be experienced.

Gonorrhœa.—Cannabis indica has been recommended in gonorrhœa, and there can be no doubt that the employment of it causes a diminution of the discharge, and relieves the violent burning pain in the urethra which comes on during and after micturition. They claim that the tincture should be given in doses of a few drops three or four times a day, but should not be given until the more acute symptoms have commenced to subside.

Neuralgia, and neuralgic headache, more particularly, has been palliated and even cured by $\frac{1}{4}$ to $\frac{1}{2}$ gr. doses of the extract, given two or three times a day. Cannabis also relieves dysuria, accompanied by bloody urine.

Chorea and delirium tremens are likewise said to have

yielded to it; in the latter, if hypnotics must be employed at all, Indian hemp is one of the least dangerous and most useful. Half to one gr. of the extract is recommended by Dr. Phillips.

Now let us draw a homœopathic picture of *cannabis indica*, and get this picture in our mind, so that when we find a patient presenting the same picture we will be enabled to *cure* this patient by the proper administration of the drug under study.

First we find recorded in the provings of *cannabis indica*:

Exaltation of spirit, with excessive loquacity.

Hallucinations and imaginations innumerable.

Anguish accompanied by great oppression; better in the open air.

Constant fear of becoming insane.

Exaggeration of duration of time and extent of space; seconds seem ages; a few rods an immense distance.

Very absent-minded.

Every few minutes he would lose himself, and then wake up, as it were, to those around him.

Frequent involuntary shaking of the head.

Violent shocks pass through the brain.

Fixed gaze.

Injection of vessels of conjunctiva of both eyes.

Letters run together when reading.

Throbbing and fulness in both ears.

Ringling and buzzing in the ears.

Drowsy, stupid look.

Lips feel as if glued together.

Dryness of the mouth and lips.

White, thick, frothy and sticky saliva.

The throat is parched accompanied by intense thirst for cold water.

Ravenous hunger.

Pain in the cardiac orifice, relieved by pressure.

A white or glairy mucus may be squeezed from the urethra.

Burning and scalding or stinging pain in the urethra before, during and after urination.

Profuse, colorless urine.

The urine dribbles out after the stream ceases.

Sexual desire excessively increased.

Rough cough with scraping immediately under the sternum.

Pulse very slow.

Pain across the shoulders and spine, must stoop, cannot walk erect.

Paralysis of the lower limbs and right arm.

Agreeable thrilling through the arms and hands.

Entire paralysis of the lower extremities.

Agreeable thrilling from the knees down, with a sensation, as if a bird's claws were clasping the knees.

Thoroughly exhausted after a short walk.

Excessive sleepiness. Sound sleep.

Profuse sticky sweat standing out in drops on his forehead.

Cannabis is therefore homœopathic to—

Alcoholic intoxication and to certain phases of *delirium tremens*, corresponding, as it does in rare cases, with the pathogenetic symptoms of Indian hemp.

Mania, characterized by spasmodic and uncontrollable laughter or by a desire to be constantly on the move; or where the patient imagines himself a king or some other important personage.

Ecstasy of the mind, such as may be induced by opium, where the fancy is filled with pleasing or roaring images, may be controlled by this drug. So may be

Chronic vertigo, coming on in paroxysms and characterized by a sensation as if one were floating off like a balloon.

Catalepsy.—Perhaps no drug presents in its pathogenesis so complete a counterpart to catalepsy as Indian hemp.

Neuralgia.—In acute cases of neuralgia cannabis indica may prove of service, especially if the patient is of nervous temperament, has been laboring under an exhausting disease, or, if a woman, is a victim to uterine disorders. We must look for the peculiar or mental symptoms of the drug to confirm the choice of the remedy.

Cannabis causes *satyriasis*, *erotomania*, *nymphomania*, *priapism*, chordee, involuntary erections and emissions,—always with amorous dreams. Its secondary effects are just the opposite, and the Hashish-eaters of the East all become prematurely impotent.

The agent is very highly recommended in *profuse menstru-*

ation, menorrhagia, and hemorrhage from the uterus of pregnant women.

In the treatment of *dysmenorrhœa* it rivals *viburnum*, *cauloph.*, and *xanthox.* It appears to control the *neuralgia* and *spasmodic varieties*, but is more particularly indicated when the patient is hysterical, emotional, and the menses are preceded, attended, or followed by unusual sexual desires.

It ought to be an excellent remedy in *sleeplessness* from mental excitement, for *nightmare*, and for the *night-terrors of children*; also for a *sleep disturbed by vivid dreams*, which weary the patient.

EXAMINATION OF THE PANCREAS.—According to Spillmann, the pancreas is not accessible for examination unless it is the seat of new formations. It is perceptible then, by pressing on the abdominal wall, in the left portion of the epigastric fossa, between the umbilicus and the xiphoid cartilage, under the border of the left lobe of the liver, when a hard, long, roundish tumor is felt. Certain retro-peritoneal tumors may give rise to the same sensation; but in tumors of the pancreas the ductus choledochus is usually compressed resulting in chronic icterus with special modifications in the character of the stools (fat stools). Terrier made a diagnosis based on the presence of an abdominal tumor in a cachectic individual with jaundice, whose urine contained sugar, and the feces fat and non-digested muscular fibres. The diagnosis was, chronic pancreatitis, which a laparotomy confirmed. The ductus choledochus was obstructed through its entire length. Tuffier found three times cancerous nuclei seated at the level of the cystic-hepatic junction. The symptoms were those of cancer of the head of the pancreas. In the three cases he performed drainage of the biliary channels. Two died, the third recovered and carries a fistula, but the jaundice disappeared with a return of the forces.—*Le Progres Medical*.

Fat-stools are often the result of destructive diseases of the pancreas or of the occlusion of its ducts; an effect easily understood if we consider the important part taken by this organ in the digestion of fat. Sahli cautions us, however, against the error of always attributing fat-stools to any of the above conditions, for, on the one hand, the stools may show an abnormal amount of fat in any case of marked icterus, and, on the other hand, cases of almost total destruction of the pancreas have been observed when the stools at the time showed no abnormal amount of fat. He further says that this is because emulsified fat, even without any pancreatic juice, can be very readily absorbed, while evidently the fat not in emulsion was taken care of by the vicarious action of the bile. Hence, fatty stools are diagnostic of pancreatic disorders only when there is no jaundice, and hence also the absence of fatty stools does not exclude destructive pancreatic disturbance.

EDITORIAL

IT IS TO LAUGH.

WE have been favored with a pamphlet entitled, "Homœopathic Medicines in Combination." By way of introduction we are told that it is the object of the pharmacists sending out the circular "to supply the physician with the drugs the latter considers requisite in the practice of his profession. Having obtained high grade and pure drugs and conscientiously prepared them with the utmost skill and care, the pharmacist's responsibility is ended. It is for the physician to say what remedies shall be administered and in what form."

"We are offering Combination Tablets prepared with the greatest care and skill, of pure drugs, and *in response to a demand from a proportion of homœopathic physicians** who are averse to being dependent upon the preparations of pharmacists who are unfamiliar with homœopathic pharmaceutics."

Next we are treated to the formulæ and their indications. A more ridiculous concatenation of hyperbolic incongruities we have never before seen,—even in old school journals devoted exclusively to the exploitation of proprietary medicines. Effete pathology is evident. Thus the list starts off with a tablet "for constipation and sluggish liver." Five thousand of them to be sold for one dollar and sixty cents! One after each meal, to be repeated in one hour if necessary. Enough pills for a dollar sixty to last for the sluggish livers of 833 1-3 meals.

Then we find a tablet for "catarrhal cold." This strikes us as great. It is composed of kali bi. 2x, merc. bin. 2x, and spongia 2x. What a trinity! Good for nose, throat and larynx! All in one little tablet! Indications are: "For catarrhal cold accompanied by cough with inflamed throat and tonsils; thick or tough stringy mucus." About 5,000 of these tablets for one hundred and forty cents.

We refrain from further quotations, as this is not an adver-

*Italics ours.—EDS.

tisement. It is enough for us to say that we find tablets for many of the ills of mortal flesh, the titles showing great care in differentiation. Pills for indigestion; pills for dyspepsia; pills for grippe; pills for dysmenorrhœa. Altogether about 30 of these wonderful formulæ.

The principle employed in constructing the formula of these combination tablets reminds us strongly of a conversation recently overheard by a member of our profession while traveling in the "Diamond State." Two farmers were seated in front of him in the car, one of whom was evidently suffering from chronic rheumatism. The other recommended him to take a remedy consisting of ground glass, alum and gum arabic. "The glass," he said, "will cut the pain out, the alum will draw the parts together and the gum arabic will hold them there." This is a D— f—'s prescription for rheumatism. (D— f— means Delaware farmer.)

Who originated them, the deponent saith not! In a few instances, the inventor who expended much cerebral phosphorus in their elaboration is given due credit. In the majority of cases, his name is withheld. What a shame! Just think of the labor spent in evolving the special indications for these wonderful combinations, and again that the inventor, discoverer, originator, or by whatever other name he may be called, shall remain in obscurity. Some of our irreverent readers will say that is where he belongs. But we do not think so. "Honor to whom honor is due" is our motto. So let his great, great cranium be brought out from under the bushel—the irreverent whispers in our ear "the bushel basket is not big enough to cover it"—and let it be honored before all mankind.

Practice of medicine made easy! No diploma needed! State boards of examiners superfluous! Sure! All one needs is a triple decked merry-go-round on one's desk. Lay in a full supply of the tablets. Twelve bottles of 5,000 tablets each to a deck, and one is ready for business. A patient calls, and has indigestion. Whiz goes the merry-go-round or wheel of fortune on the quick road to health! It is deftly stopped in its giddy whirl at number 22, and we help ourselves, and shout "Next!" Or even better, let us have scientifically devised slot machines to stand guard during the doctor's absence. Patient calls, drops his fee in the proper slot; prescription drops down; and patient goes away happy. Again, why should a doctor's

office be necessary. Put the machines in the railroad stations, barber shops, hotel bar rooms, etc., etc., create a great pill trust! Surely, dear reader, there's millions in it!

But this is only a wild pipe dream. We must, after all, go on practicing medicine in the good old way, for combination tablets are lacking in one important ingredient. They are never mixed with brains.

But this subject has a very serious side. The firm of pharmacists sending out the circular we have criticised, is one known the country over for its honor and honesty, and for its many years of successful business career. May it have twice as many more years of prosperity and honor! Its work well deserves it. While we have been "hitting at them" apparently, it is their customers who are to be blamed. They manufacture drugs for business reasons; they give a good commodity for the same reason. They have held their patrons long and well. Then why do they manufacture such stuff? Because there is a demand for it; that and that only. They are after business. If they did not make the goods, their customers in all probability would go to some concern who would do so; and possibly said customers would not return to purchase legitimate preparations. The circular then is a potent criticism of the therapeutic methods of certain members of the homœopathic profession. We deplore this greatly. For several years past, the old school profession has been decrying polypharmacy as unscientific. About the time they have gotten well on to the right road, some of our men switch off and take to what may inelegantly, though none the less truthfully, be called "sloppy prescribing."

THE PENNSYLVANIA STATE SOCIETY.

As announced in our news columns, the Homœopathic Medical Society of the State of Pennsylvania will meet in Philadelphia on Thursday, Friday and Saturday, September 6th, 7th, and 8th. The World's Homœopathic Congress will open its sessions at Atlantic City on Monday, September 10th. The action of the Board of Trustees of the Pennsylvania State Society in making this arrangement is to be commended. In past years the Pennsylvania State Society has met during the month

of September and has never been up against any counter-attractions. The meeting of the World's Congress in conjunction with that of the American Institute in September, raised a question as to the wisdom of the State Society's holding its annual session at this time, excepting in conjunction with the larger bodies. For the State Society to have adopted the latter course, while at first sight wise, would have been most ridiculous. In the first place, it had no invitation to meet in this way. Had it so convened, the sessions would have been illegal, for the State Society is an incorporated body, and by its charter, its annual sessions must be held within the borders of the State of Pennsylvania. Another very important reason, which likewise applies to other societies which have already appointed to meet at Atlantic City, September 10th, is that the society would lose its individuality and be but an unimportant side-show in comparison with the greater attraction. If perchance, it should prove a success, it must detract from the value of the sessions of the parent body.

As matters now stand, members can attend the meetings in Philadelphia, and then proceed to Atlantic City. Invitations will be extended to members of the American Institute and foreign delegates to attend as guests. This will prove an incentive to the Pennsylvanians to provide a more than ordinarily attractive programme, and make it almost certain that the Philadelphia meeting will be the best ever held by a society that has always been famous for its good work.

PROFESSIONAL SERVICES TO PHYSICIANS AND THE PAYMENT THEREFOR.

THE laity labors under the impression, perhaps not unjustified, that physicians are a contentious class; and yet there exists in no other body of men, a more beautiful example of brotherly courtesy than the cheerfulness with which one physician gives his services freely to another who stands in need of them. An eminent physician while travelling abroad was taken ill, and was attended by a confrere to whom he was unknown excepting by reputation. The illness over, the patient requested his bill, and was very promptly denied his request. "But," he said, "I have no way of reciprocating." "You are

mistaken," said the other, "You can give your services to some other professional brother who stands in need of them." The wife of a physician was travelling and was taken ill. A physician, who happened to be an entire stranger to both the lady and her husband, was called in, and he attended cheerfully, and charged nothing for his services. A physician is ill in his own town, and immediately he has at his command the free attendance of his choice of the local profession. Now we would not have this state of affairs to be different from what it is. Unfortunately, the privilege is greatly abused by the thoughtless and the grasping. Sometimes it is abused in a way to work a positive injustice to the dispenser of the favor.

Our remarks on this subject have been called forth by a lawsuit in a New York court. The facts as we give them are as stated in a newspaper report of the trial. Whether correct or not, they serve to point a lesson. An aged physician, who had amassed a sufficient sum of money to enable him to live without depending upon his profession, was taken ill, and was attended by a New York City consultant. Numerous visits were made—visits which consumed much time, and must therefore have been more or less onerous. The patient died. A bill was presented to the estate. Payment was refused on the ground that physicians never rendered bills to each other for professional services. Suit was entered, and judgment for the entire amount claimed was given. Unfortunately the newspapers in reporting the same used such headlines as "Courts give medical ethics a solar plexus blow." No one ever contended or could contend for one minute that the courts could recognize any of the written or unwritten articles of the medical code. From the first, it was evident that a verdict could be rendered but one way. In this particular case, it seems to us, from the facts at our disposal, that the verdict was within the spirit of the code. The deceased physician left no minor children. It is to be presumed therefore that he left no dependents. The bill was then against the estate, the beneficiaries of which were not in need of professional charity, and should not have expected it.

Physicians as a class, are rarely in a comfortable financial position. It therefore becomes the duty of every one to manage his business affairs in such a way that he can place his near and dear ones, in case of his premature death or inca-

capacity, in a position that they shall not be obliged to ask for charity before the world. To this end, we believe that he should exact payment of the clergy—a class of men who are not entitled to our courtesy as to charges for professional services—and to the following classes of physicians and their families:

Medical graduates, who have given up the practice of medicine, and are engaged in some other calling.

Medical graduates who are practicing secret methods, and who advertise for business, and are otherwise unethical.

Physician's children who earn their own living, unless their parents depend upon them for support.

Parents and other relatives of physicians, unless depending upon their professional relatives for support.

Physicians who have retired from practice on a competence.

Services should be given freely and payment positively refused no matter how urgently requested under the following circumstances:

Physicians and their families dependent upon them for support when residing in the regular bailiwick of the party of whom services are solicited.

Parents and relatives of physicians not in their immediate family, if dependent upon a physician for support.

Parents and other relatives from whom a medical student or young physician derives his support while pursuing his studies or waiting for practice.

Consultations with other physicians under the circumstances above listed.

Consultations within a reasonable distance, the physician receiving the services being in limited circumstances. The party receiving the service should remunerate the benefactor by paying his expenses.

Under the following circumstances, payment may be accepted, but no bill rendered:

Visits or consultations at a distance.

Special services demanding high skill and personal risk, or hazarding one's health or practice.

Physicians consulting another at a distance to the neglect of his local profession, when the act is prompted by himself, and not by his medical adviser.

The greatest law given to man should guide us as in our

business relations with each other. We refer to the Golden Rule. Follow that, and we cannot err. Physicians are proverbially poor patients. They do not bear illness complacently. They are too apt to consult one physician after another, following the advice of each in a haphazard sort of a way. It is not unusual to meet with a doctor who has already consulted no less than twelve different medical advisers. Indeed, we might say it is almost always the rule, for such to be the case in serious or long lasting illnesses. The sick should therefore consider the time and interests of their confreres. We have in mind one colleague who one day last winter had no less than five physicians or physicians' wives on his visiting list for the day. Unfortunately, the recipients of his professional courtesy were widely scattered as to location, and we know that the services must have entailed a work of self-sacrifice to the giver. Let each physician who is ill but stop and think as to how he would like his patients to treat him under like circumstances, and then let him go and do likewise.

Let us close by remarking that one of the grandest examples of the brotherhood of man is found in the way physicians look after each other's sick without money or without price. Let neither party to the unwritten contract abuse the privileges it gives him.

OUR DUTY TO SAN FRANCISCO.

ON the evening of Saturday, April 21st, "a special committee of 21" appointed by Dr. Tuller, President of the Homœopathic Medical Society of Philadelphia, met to consider the question of affording relief to our physicians in San Francisco. To effect this object, a special meeting of the County Society was called. The move started in Philadelphia is almost certainly being carried on by our Societies the country over. If any of them have neglected the work, they should start in with it at once. The need for help is so urgent that no organization should wait for notice from official circles; let all act immediately.

The number of our physicians in San Francisco is 75. A majority of them have in all probability, lost their entire professional outfits. Under the circumstances existing in their city, the work of rehabilitating themselves will be long delayed.

The utmost help that we can give them will fall far short of their requirements.

Let us hope that the President of the American Institute of Homœopathy backed by the Executive Committee will take the matter in hand and organize the efforts which will be made by State, County and Local Societies the country over.

Let each man give to his utmost ability. Let no officers of societies stand on technicalities. Neglect of duty in the premises is cowardice. Every official board acting in the name of Charity will be enthusiastically sustained by their societies.

AN IMPORTANT EVENT IN MEDICAL HISTORY AND ITS LESSONS.

VERY few meetings of medical societies have ever been of such widespread importance as that of the Boston Homœopathic Society, held March 1, 1906. By way of preface, let us say that Boston vies with Philadelphia in being the most conservative of cities, at least from a medical standpoint. Its old school institutions are the most straight laced possible in their adherence to the medical codes of the past. The sole prominent medical journal, the *Boston Medical and Surgical Journal*, now in its 154th volume goes on the even tenor of its way, not attempting to compete in size with the large medical weeklies of New York and Chicago. Its pages maintain the standard of quality rather than of quantity. It seeks not to be the whole thing, but simply attempts to fill its place in the making of medical history; this and nothing more. It exchanges not with homœopathic publications. Homœopathy is treated by a policy of silence.

Boston is a city in which is located an office building which will not accept homœopathic physicians as tenants.

And now it is our pleasure to record the important event of March 1st, and comment thereon.

On that date, Dr. Frederick C. Shattuck, Jackson Professor of Clinical Medicine in Harvard University, read a paper before the local homœopathic society on "The Value of Drugs in Therapeutics." He was followed by Dr. Frederick B. Percy, Professor of Materia Medica, Boston University School of Medicine, who discoursed on "The Homœopathic Prin-

ciple." Both essays were then opened to discussion, which was opened by Dr. Walter Wesselhœft, and continued by Dr. Rice, J. Herbert Moore and Richard C. Cabot, and closed by Dr. Shattuck. Both essays and discussion are fully recorded in the *Boston and Medical and Surgical Journal* of March 20th, 1906.

Dr. Shattuck opened his paper with reference to Dr. Holmes's famous phrase concerning the throwing of all drugs into the mighty deep. He then goes into a mild optimism as to future additions to our knowledge, and mentions as an example of a new and good thing, the systematic and proper use of urotropin in typhoid fever to prevent patients disseminating the disease by way of the urine. Next he expresses his hearty disapproval of the irrational and indiscriminate therapy which has ruled the medical world since the time of Galen, and which we might add, still rules. It is true that all rational physicians believe "food, sleep and fresh air to be the trinity of health, and that if we can regulate the lives of our patients, we can largely dispense with drugs." The number of specifics, he states is very small, and mentions quinine as a specific for malarial fever, mercury and the iodides for syphilis. He does not think that the salicyl compounds are entitled to be considered as specifics for rheumatic fever. Antitoxins and glandular extracts he does not class as drugs, properly speaking. "It may be broadly stated," he says "that drugs are in the main adjuvants only; that such beneficial effects as belong to them lie in their power to alleviate some untoward symptom like indigestion, insomnia, pain, which retards or prevents recovery. This is eminently true of those acute and chronic infections, for which we have, as yet, no antidote, such as typhoid, pneumonia, the exanthemata and tuberculosis. In these the action of drugs at present known can be only indirect. All that we can now do is to put the patient under the most favorable conditions possible in order that we may help him manufacture his own antidote. Many a case of acute infection especially, goes through our hands without getting any drug at all." He then mentions certain conditions in which the use of drugs is almost indispensable, speaking of the value of digitalis in myocardial disease, of calomel in so-called biliousness, bismuth in indigestion.

He then speaks of the power of suggestion as a therapeutic

agent and attributes many cures which have been supposed to be due to the drug employed to psychical effects only. He approves of the use of suggestion in a proper way, but warns the physician that he must be careful to distinguish those cures which have been wrought by suggestion from those which have been the result of drug action in order that he may not be deceived in his own mind.

Dr. Shattuck regards the leading therapeutic principles to be as follows:

First.—Do no harm. This principle seems to be well met by the homœopathist who uses the infinitesimal dose. He does no harm save in so far as he may miss doing good.

Second.—Try to see as clearly as possible just why you give a drug, your purpose in giving it, whether as a specific, curative, palliative or as a placebo.

Third.—As far as you *can* give this drug uncombined. This is a general rule subject to many exceptions. Rules, however, are made to break. They are our servants though we too often allow them to be our masters. But in breaking rules we must use our brains, an exercise which most of us avoid as much as we can.

Fourth.—In using an efficient drug be as sure as you can of a good preparation, and then give it until something happens,—either the desired effect or evidence appears that the limit of toleration has been reached, which has been called the physiological, but which I should prefer to call the toxic effect.

In closing his remarks Dr. Shattuck said: "In essentials you and I agree, I think. As far as the selection and the size of the dose go, unless my observation is woefully at fault, we are daily coming closer together. I frankly state, that in my opinion, homœopathy has done its work. You and I are separated in name rather than in fact, and, though I am no longer young, I hope and expect to see a single State Medical Society, comprising within its ranks all educated and honorable physicians, animated by the sole desire to advance knowledge, elevate the profession of medicine and serve the best interests of the community."

Dr. Percy began his address by referring to the chaotic state of medical knowledge prior to the time of Hahnemann, and how assiduously and scientifically Hahnemann labored in the attempt to formulate some rational rule as a guide in drug ad-

ministration. In his opinion the essentials of a law of cure are:

First.—That every drug should be thoroughly tested upon the healthy human body, and that the facts thus elicited should be supplemented by experiments upon animals, and also by the results of poisoning when that is possible.

Second.—That the conditions thus occasioned are those which when present in diseased states will be cured by these same drugs.

Third.—That the dose to accomplish this must be sufficiently minute to occasion no aggravation of the symptoms present.

He then referred to the fact that though many of the theories of disease and of the manner in which a drug produces a cure, which grew up along with homœopathy have been proven to be of doubtful value, that the truth of the law of similars rests on a more and more certain basis as knowledge increases.

The discussion which followed the reading of these papers was participated in by prominent members of both schools of medicine, including Dr. Walter Wesselhœft, Dr. Rice, Dr. J. Herbert Moore, Dr. Richard C. Cabot, Dr. Shattuck and others. The discussion was characterized by a spirit of fairness and freedom from prejudice on both sides.

The sentiments expressed at this meeting, as well as other recent utterances of prominent old school physicians on various occasions, indicate a growing tendency on the part of "our friends, the enemy," to extend the olive branch to the homœopathic profession, with a view of ultimately offering us professional affiliation with members of the allopathic school. There was a time when such a recognition of homœopathy would have been a great help to our school and to the principles for which it stands. To-day it can be of but little value to us as a school. We have developed in our own ranks expert men in the various medical and surgical specialties whose skill is fully equal to that of the specialists of the old school, and we have builded colleges and hospitals whose facilities for instruction and for the care of the sick are unsurpassed by any similar institutions in our land. The value of the homœopathic method in the treatment of the sick, and the general competency of homœopathic physicians has long been acknowledged by the great body of intelligent and educated people, and there are to-day

very few sections of our country where the professional standing and the popularity of homœopathic practitioners is not fully equal to that of our old school colleagues.

There is, therefore, little for the homœopathic school to gain from recognition by the allopathic school, save from a purely theoretical standpoint. While we should always welcome any sincere and honest advances from our old school brethren which have as their object the promotion of professional unity, nevertheless, it should be clearly stated that we do not seek this affiliation at the price of any of our essential principles and that we can consider no terms of union that do not carry with them full recognition of the equality of the professional standing of physicians of both schools and the utility, within its proper sphere, of the homœopathic law of cure.

Dr. Shattuck stated in his discourse that he expected to live to see the day when the two great schools of medical practice would unite in a single society in the State of Massachusetts. If by this he means that the members of the old school medical society are beginning to recognize the folly and the uselessness of their attempts to boycott homœopathic physicians, and are willing to admit the error of their ways and to acknowledge the value of the homœopathic method of practice, we rejoice with him that the day is close at hand when with unity of spirit and of purpose the members of both schools shall be joined together as brothers. But if he means that for the sake of a theoretical acquiescence by the dominant school of medicine to a method whose utility and rationality has been repeatedly tried and proven, the members of the homœopathic school should be willing to abandon their methods of practice and to recant the principles for which they have always stood, we feel convinced that Dr. Shattuck has made a mistake and that the homœopathic school will never seek old school recognition at such a price.

FROM OUR MORNING MAIL.

“DEAR DOCTOR: I am sending the enclosed circular to some of the members of the ‘American Institute of Homœopathy.’ We consider the enclosed proposition liberal and secure. Read it. Read it again. It will pay you to be with us. We are

desiring this company to be the nucleus of a larger one; and we would like you to come in and help us grow.

"In order to make you a special inducement we will offer you free one share of common stock for every five shares of preferred stock purchased. The common stock will begin to pay dividends the first month after it is issued. It will probably never sell for less than par, and will be in demand at par. On \$1,000 investment you will receive free \$200 worth of common stock which will pay you say \$12 or more the first year, and \$1,000 worth of preferred stock which will pay you \$80, making your first year's income equal to \$292 on an investment of \$1,000. This is the beginning. I understand the oil business and can select well paying oil properties, thus eliminating the speculative element.

"Doctor, the oil business is the greatest money-making business on earth. The only way you can keep in touch with it is to be an owner.

"Your investment will be carefully guarded.

"Yours truly,

_____,"

The above is reproduced *verbatim et literatim* without comment.

TO CURE THE SICK.—The one and only goal of the medical practitioner should be to heal, to cure the sick. It needs no study to prescribe pain killers, but it does need study to cure abnormal conditions of the system which cause pain. What are our homœopathic pharmacies doing? At the request of many so-called homœopathic physicians they are compounding all sorts of drug combinations, and of their own volition many more. What is the result of all this? Men, who would be students in the practice of medicine, if these things were not, now deliberately and without study of the patient use all sorts of combinations, get no good results, abuse the science of medicine as being a myth, as no good anyway, and finally degenerate to the level of the quack.—*The Medical Counselor*.

FRUIT AND URIC ACID.—Jerome in *The Lancet* says: (1) Pears, fresh figs, grapes, dates, and oranges may be taken not only with impunity but with distinct advantage by those who suffer from uric acid calculus and gravel. (2) The beneficial effect, which will be, *ceteris paribus*, in proportion to the amount taken, is due essentially, if not entirely, to the lessened acidity of the urine. (3) Marmalade does not raise the precipitability of the uric acid, though in the quantity likely to be taken it fails to produce the opposite effect, probably because the amount of fruit pulp is insufficient for that purpose.

GLEANINGS

THE TREATMENT OF DIFFUSE AND GENERAL PERITONITIS WITH SPECIAL REFERENCE TO THE MURPHY METHOD.—Gibbon briefly reviews the three principal methods of treating diffuse septic peritonitis, *i. e.*, (1) Immediate laparotomy and thorough flushing of the peritoneal cavity. (2) The immediate opening of the abdomen, removal of the cause of inflammation and drainage of the abdominal cavity with the least possible disturbance of the viscera; and (3) doing nothing in the way of operative interference, but simply keeping the stomach empty and the patient quiet until the inflammation has become localized and then operating. Murphy has been the greatest advocate of the second method and his report of successes is wonderful, 29 cases of general peritonitis with but a single death.

Gibbon has treated eight cases in this manner with three deaths.

Briefly the method consists of making a small abdominal incision, removing the source of inflammation and placing a drainage tube in the pelvis. The patient is then placed in the Fowler position (the head of the bed being elevated to 45°) and a quart of saline solution is introduced into the rectum every two hours. The latter can be done by elevating the douche bag but eighteen inches above the bed and allowing the solution to flow in very slowly. The rectal tube can be retained for 24-48 hours without inconvenience to the patient. Water can also be administered by the mouth.—*New York Medical Journal*, April 7, 1906.

J. D. ELLIOTT, M. D.

A POINT IN THE TECHNIQUE OF BREAST AMPUTATION.—When removing a breast for carcinoma Weir treats the glands of the neck in the following manner. After removing the breast and cleaning out the axilla, the patient's arm is pulled vertically upward and it is then possible to carry the finger beneath the clavicle to one side of the axillary vessels and thoroughly palpate the supraclavicular space behind the sterno-cleido muscle. If any enlarged glands are present they can be removed, otherwise the wound is closed in the usual manner.—*New York Medical Journal*, March 3, 1906.

J. D. ELLIOTT, M. D.

THE RESULTS OF SURGICAL TREATMENT OF EXOPHTHALMIC GOITRE.—B. Farquhar Curtis has performed sympathectomy seven times, with three deaths, and thyroidectomy fourteen times, with four deaths, for exophthalmic goitre.

Of the ten patients who recovered from thyroidectomy, one was improved, but has not been seen since. One case was improved for two years, relapsed, later had the superior thyroid artery on the other side ligated with improvement, and again relapsed. Eight cases can be claimed as practically

cured, having been followed six months (two cases), eighteen months, two years, five years, seven years, eight years, and twelve years. Two of these cases were slight, but the rest serious, and some in a dangerous condition. The four patients who died were advanced cases.

Of the four cases who recovered after the sympathectomy, one relapsed within nine months, and died of the original disease in a little over a year after the operation. One case was completely cured five years after operation. One case was almost cured and improving, when she acquired nephritis about one year after the operation, and has probably since died. The remaining patient is able to do her work and enjoy life without medication, although goitre, exophthalmus and slight tachycardia persist—a practical cure.

As sympathectomy is much more difficult than thyroidectomy, not so easily done with local anæsthesia, the mortality is fully as high, and the scar is higher and therefore more disfiguring, not an unimportant factor in some cases, the author has gone back to thyroidectomy.

In order to avoid acute thyroidism after operation, the cause of death in practically all of the fatal cases, he advises the preliminary ligation of the thyroid arteries and the use of local anæsthesia. And he believes it is advantageous if not absolutely necessary to have the preliminary treatment by rest in bed, icebag to heart, bromides, etc., carried out at the hospital where the operation is to be done, in order that the patient may learn to know and trust the surgeon, and to like the nurses, growing familiar with her surroundings. This adds greatly to the control of the patient under local anæsthesia.

In the author's opinion surgery should be reserved for severe cases which have resisted medical treatment, but he does not believe that it should be undertaken as a last resort and forlorn hope, for the mortality is certainly high in bad cases, and when the patient is in poor condition.

He has not made an indiscriminate collection of cases from literature, but by combining his own cases with those of Schulz, Kocher, Mayo, and Hartley he has 136 cases treated by thyroidectomy, with 17 deaths. Four relapses occurred and several cases were lost sight of early. As so many of these cases have been followed for several years and have continued well without any treatment whatever, the operative successes do not represent the periods of temporary improvement so often seen in exophthalmic goitre with or without treatment.

Whatever the danger of the operation may ultimately be shown to be, even if it should continue with a mortality of twelve per cent. or more, there can be no doubt that nearly all of the survivors will be cured of their symptoms, and it will probably be long before any internal treatment will be able to show such results in advanced cases of this most distressing disease.—*Annals of Surgery*, March, 1906.

J. D. ELLIOTT, M. D.

SCOPOLAMINE-MORPHINE—CHLOROFORM ANAESTHESIA.—H. J. Whitacre, from his experience with this form of anæsthesia and from a careful study of the fourteen deaths reported during its use, reaches the following conclusions:

1. Scopolamine-morphine narcosis is not devoid of danger.
2. The use of scopolamine and morphine alone for surgical narcosis is not justifiable and in his experience not practicable.
3. A single dose two hours before operation lessens the discomforts attendant upon the operative procedure to a high degree, and may obtain a definite place in surgical practice.
4. Four deaths have occurred in a series of 2,400 cases, which have been so definitely related to the use of this method of narcosis that they may be called scopolamine deaths. This, however, in the absence of an autopsy demonstration.
5. These deaths have been reported as occurring with a type picture of alkaloid poisoning, and heart failure has been given as a direct cause of death. (Landan.)
6. A fatty degeneration of the liver and kidney has been produced by the use of repeated doses of scopolamine in combination with morphine, in animals.
7. This method of producing or assisting narcosis can not yet be recommended for use in general practice in spite of the great advantage it seems to offer. (Kochmann.)—*New York Medical Journal*, March 31, 1906.

J. D. ELLIOTT, M. D.

THE PROGNOSIS OF POSTOPERATIVE FEMORAL PHLEBITIS.—Schenck found 48 cases of femoral phlebitis in 7,130 patients who were operated in the service of Dr. Howard Kelly, at Johns Hopkins Hospital. He has succeeded in getting complete data of 29 of these patients to October, 1904. From these histories he draws the following conclusions as to the prognosis of this condition: (1) That all patients have symptoms for a period varying from two to four months.

(2) That if the symptoms persist longer than six months (by which time the collateral circulation is probably as completely established as it ever will be) there is small chance that they will ever disappear.

(3) That in about 65 per cent. of all cases there is never complete freedom from attacks of pain and swelling.—*New York Medical Journal*, March 31, 1906.

J. D. ELLIOTT, M. D.

A NEW METHOD OF EXCISING THE KNEE WITHOUT OPENING THE JOINT.—Flint describes the technique of this operation, which he has originated, and thinks it has the following advantages: 1. It is quick. 2. There is little danger of contamination of the wound by tuberculous or other infections from the joint. 3. Hæmorrhage can be reduced to a minimum. 4. The operation is thorough, there being but slight chance of leaving diseased tissue behind, thereby diminishing the probability of recurrence.—*Annals of Surgery*, March, 1906.

J. D. ELLIOTT, M. D.

GLAUCOMATOUS CLOUDINESS OF THE CORNEA.—The author believes that in acute glaucoma the cloudiness of the cornea does not depend on an edema, as has hitherto been supposed to be the case, but upon a stretching of the cornea whereby doubly refracting elements are induced to appear which

causes a multiple reflection of light. The theory is based on experiment, clinical observations, and pathological anatomy. A cloudiness of the cornea is produced by injection of fluid into the vitreous which is similar in appearance to that of acute glaucoma.—Dr. Berlin P. Silex, *Annals of Ophthalmol.*

WILLIAM SPENCER, M. D.

EMBOLISM OF THE CENTRAL ARTERY OF THE RETINA WITH RETENTION OF NORMAL VISION.—The author gives the history of a case of embolism of the central artery of the retina attended by the very unusual phenomenon of retention of normal vision. The patient was an unmarried woman, 43 years of age, who had had typhoid fever, scarlet fever, and rheumatic fever, and at the time of this observation had dilation of the left ventricle and valvular disease of both the aortic and mitral valves with symptoms, the consequence of impaired circulation. Six years before she had had an attack of blindness in left eye, which passed off without leaving any untoward effects. She presented herself with severe supraorbital pains over the left eye which was said to be worse at the menstrual periods, but the menstrual functions appeared to be normal. The vision of both eyes was normal. The pupillary reflexes were normal. The right field of vision was full, but the left one was markedly contracted and limited to an area extending from the macula to the disk. Upon ophthalmoscopic examination, the fundus presented a peculiar appearance. The whole fundus was edematous, with the exception of the papillo-macular region. Around the latter there was a fringe of numerous fairly large hemorrhages. The central artery was contracted. The fundus gradually resumed its normal appearance except that the disk paled a little and the arteries seemed slightly contracted. Vision continued to be 6-6. The supraorbital pain subsided. The retention of good vision was due to the presence of a cilio-retinal artery. The macular region received the whole of its blood supply from the branches of this vessel and so escaped the effects of obstruction in the central artery. It was noted that the yellow spot occupied a much lower position than is usual. Thus the area toward the disk extends in an upward and inward direction, and the field of vision therefore extended correspondingly downwards and outwards from the point of fixation. Four years later, the patient was the subject of another attack, but recovered normal vision.—Dr. P. J. Hay, *The Ophthalmoscope*.

WILLIAM SPENCER, M. D.

THE VALUE OF RECOGNITION OF ERRORS OF REFRACTION IN FUNCTIONAL DISEASES OF THE NERVOUS SYSTEM.—The author says regarding epilepsy: While it has always been my custom to remove any abnormal conditions of the eyes, just as I correct any intestinal, nasal, or uterine diseased condition, in order to place the patient in the most favorable position to respond to special treatment for the disease itself, I have never found, in one case more than another, that it had any special influence, such as we could trace directly to it, in effecting a cure. Chronic chorea I have never seen in any way affected by correction of errors of refraction. A number of years ago, this subject was rather exhaustively taken up by the New York Neurological Society, and cases of a chronic nature of both epilepsy

and chorea were placed under treatment, the bromide when possible being exhibited. After many weeks' and months' trial the results were negative.

As to melancholia he says: I cannot observe any direct relation in cases which have recovered to treatment for any special organic disease, either of the eye, stomach, uterus, or other organ. All this should be done on general principles, but we should not deceive ourselves into believing that the organic disease has acted either as a causative agent of the disease or as a pathological entity in its continuance. Still further removed from the possibility of its slightest bearing on the disease, can we conceive of eye-strain as influential.

General Paresis is a disease with a known pathological history, inflammatory in character, affecting the meninges and cortex with disturbance of the vascular supply; and yet cases are recorded of cure of this disease by correction of errors of refraction. It is indeed important to emphasize the futility of such claims, tending as they do, to interfere with the early treatment of one of the most serious mental diseases with which we have to deal and whose only hope of benefit lies in the very earliest attention and care possible. —Dr. D. Edward Fisher, New York, *Annals of Ophthalmol.*

WILLIAM SPENCER, M. D.

REMOVING THE SEVERED FETAL HEAD REMAINING IN UTERO.—Ruhl (Dillenburgh) in criticizing a recent article which suggested the use of a procedure consisting in making prolonged traction on the remaining head by means of a weight attached to it, reports four cases of this rather disconcerting complication which he successfully terminated. He thinks the best method to pursue consists in placing two fingers into the mouth immediately after the delivery of the body, and making traction, while with the other hand pressure is made on the abdominal walls, and so the head is made to enter the pelvis. During this traction attention must be given that the head follows the usual evolutions during delivery. For instance, as long as the head is above the pelvic brim, it must be grasped in such a manner that the sagittal suture shall enter the transverse diameter. It is not advisable to apply the forceps to the head while yet above the pelvic brim, and they will usually also slip off. But the forceps may be applied as soon as the head has entered the pelvis.

If this method is not successful, the head must be perforated, and traction must be performed by means of the cranioclast. In order to accomplish perforation it is necessary that the head be fixed externally by a skilled assistant and pressed downward upon the pelvic brim and held there immovably. It is because this fixation of the head from above is imperfectly performed that many a case has failed or such great difficulties have arisen. Perforation may be accomplished through the mouth into the cranial base or the head may be revolved until a fontanelle is accessible, or in a flat pelvis through an orbit. The cranioclast is probably the best instrument with which to effect extraction.—*Centralbl. f. Gyn.* 1905, 1414.

THEODORE J. GRAMM, M. D.

THE EFFECTS OF INDUCED MENOPAUSE.—From a study of this subject and from some experiments conducted by Pollak (Vienna) he confirms the views of Curatella and Tarolli that in the absence of the internal secretion

of the ovaries there results a decrease of the oxidization of the fat in the body so that the unconsumed fat not only pervades the parenchymatous organs but is also deposited in the muscular fibres of the heart whose physiological function it weakens.—*Monatsschr. f. Geb. u. Gyn.* XXII, 327.

THEODORE J. GRAMM, M. D.

THE INFLUENCE OF MENSTRUATION UPON THE ORGANISM.—Maria Tobler (Florence) has studied this subject anew, and says the menstrual period represents a time of diminished well being and of capacity for work. This, however, is not to be regarded as primary or necessary, but is rather the consequence on the one hand of a degenerated constitution, and on the other hand of an improper mode of living which cause the products of increased tissue change formed by the periodic irritation arising in the genital system, instead of being used or disposed of by the system, to become toxic. For a large number of women have not only acquired their menstrual disturbances after a long period of freedom from ill health, but many have no disturbance whatever, and in some instances the menstrual period is attended by increased vital energy as might be theoretically expected of a time during which a new being may be developed.—*Monatsschr. f. Geb. u. Gyn.*, XXII, 1.

THEODORE J. GRAMM, M. D.

THE INTERNAL SECRETION OF THE OVARIES AND OF THE PLACENTA IN THEIR RELATION TO LACTATION.—Halban's investigations of this subject, based upon animal experiments, exact observations upon the human being, and his experience after gynecological operations, have led him to definite conclusions which are in accord with our modern views of internal secretion, and place our knowledge of the function of the mammae upon a satisfactory basis. The article itself is entirely too extensive to admit of a brief abstract. Some of his results, selected by Courant, may be mentioned: The development of the mammae at puberty is dependent upon substances which are secreted by the ovaries. The same is true of the menstrual mammary changes. During pregnancy the ovaries do not represent the trophic centres of the other genitalia and of the mammae, as is the case in the nonpregnant state. In this respect their function during pregnancy is not important. The ovaries have no influence upon the mammary hyperplasia of pregnancy, or upon lactation for the latter occur after castration during pregnancy. The mammary changes of pregnancy are not the result of the products of tissue changes of the fetus, since they persist after longer death of the fetus. The fetus has nothing to do with the reactions characteristic of pregnancy, but they arise from the placenta, especially from the trophoblasts and chorion epithelium. The first or embryonal impulse to development of the mammae may be regarded as an effect of the placental substance. It is a general characteristic of the placental and ovarian substances to produce hyperæmia and hemorrhages. The action of ovarian and placental substances is quite similar, but the effect of that of the placenta is much more intense. During pregnancy the placenta assumes the protective function of the ovaries. Neither during labor nor in the puerperium is the uterus involved in these processes, for we see that lactation is instituted whether the uterus is present or not.

Lactation cannot be produced by nervous influences; neither is it induced by the act of suckling. The latter is simply a stimulant. Parturition as such cannot be regarded as the cause of lactation. Puerperal involution is nothing else than a true atrophy, physiologically induced by the removal of the placenta. It is not the removal of the fetus, which determines lactation. It can only be the placenta, especially the chorion epithelium, whose biological secretion gives the impulse to lactation.—*Arch. f. Gyn.*, Vol. 75, 353.

THEODORE J. GRAMM, M. D.

THE SCIENTIFIC INDICATIONS FOR MYOMECTOMY.—From a careful study of 1,000 cases of fibroid tumors, Winter has endeavored to determine this question, and formulates his conclusions as follows: Hemorrhages occur in about two-thirds of all cases of fibroids, especially in the submucous variety, and are usually menorrhagias rather than metrorrhagias. Metrorrhagia suggests the suspicion of malignant degeneration, secondary degeneration or submucous development of the myoma. These conditions also are usually the cause of hemorrhage during the menopause, and then the myoma should be removed. When menorrhagia exists the indications for treatment are determined by the degree of anæmia. Pronounced anæmia with small tumors indicates a submucous development. Anæmia amounting to 30% hæmoglobin presents no danger for the operation if the necessary precautions are observed. The ergotin treatment is only effectual in purely interstitial myomas of moderate size. Curettement of the uterus must only be performed when a submucous myoma can be excluded, and is most effectual in submucous and small interstitial tumors. Since the results are always doubtful, it is not to be used when the anæmia is pronounced. Submucous myomata associated with hemorrhage should be removed.

Regarding the cause of pain, the author says: The size of the tumor is rarely the only cause of the pain; in fact pain is rarer in large than with small tumors. Subserous myomata most frequently cause pain. Pain is also frequently present when the development of the tumor into the peritoneal cavity is impeded by being situated subperitoneally or within the broad ligament. Submucous fibroids often cause dysmenorrhœa. Pain is often caused by complicating para-or peri-metritis and adnexal disease. It is frequently present in secondary changes in the myoma, such as sarcoma, carcinoma, necrosis, softening, and suppuration. One hundred and fifteen cases were operated solely on account of pain, or in combinations with other symptoms.

Vesical symptoms, such as tenesmus, dysuria, ischuria, incontinence, are only to be regarded as indications for operation when they cause serious suffering. There appears to be no specific connection between myomata and heart disease. This is particularly true of valvular diseases. The anæmia may induce dilatation or fatty degeneration of the heart muscle. Brown atrophy occurs only when the system becomes greatly affected. Myomectomy cannot be expected to favorably influence endocarditic valvular defects; but in the highly anæmic a cessation of the hemorrhage benefits the heart muscle, removes secondary anæmic dilatation and prevents advancement of beginning degeneration. Anæmic dilatation may be cured by the removal of the hemorrhage. Myomectomy is to be performed

therefore on account of hemorrhage in valvular disease and primary myocarditis as soon as the hemorrhage is excessive; also when the former are absent, but when symptoms of dilatation supervene. Psychoses and hysteria are not usually caused by fibroids, and cannot be cured by myomectomy. In general, Winter does not favor operation in cases of fibroids which cause no symptoms. Operation is indicated not because of the presence of the tumor, but because of local or general symptoms produced.—*Zeitschr. f. Geb. u. Gyn.* Vol. 55, 49

THEODORE J. GRAMM, M. D.

IS SYPHILIS A MORE SERIOUS DISEASE THAN GONORRHOEA?—This article by Dr. Alex. Doktor (Hungaria) touches upon a subject which cannot too frequently be brought to the attention of physicians in order to overcome the lightheartedness, not to say frivolity, with which the subject of gonorrhœa is regarded in some quarters. The author says syphilis is of course a serious disease, and yet we possess in mercury and iodine reliable remedies. But gonorrhœa rarely presents itself in such a serious form that it leads to death, and so its seriousness in other respects is often disregarded. The author is, however, of the opinion that the contagious venereal diseases cause greater destruction than tuberculosis and cancer, mainly because they are more common. Gynecologists have reason to be particularly impressed with the destructiveness of gonorrhœa because they know of its frequency and see its end results. It too causes death, but not in the direct manner as do cancer, tuberculosis and syphilis. In diagnosis, the name of the fatal disease is often a different one, and the original cause of the malady, namely gonorrhœa, remains in the background. To illustrate, he relates a case of pyonephrosis directly traceable to gonorrhœa, and another case of urethral stricture and calculus arising from the same cause. These cases are from the broad field of general surgery, wherein the original gonorrhœal cause of disease is easily lost. But how many old prostates may trace their trouble to a forgotten gonorrhœa. For such, operative procedures have been devised, but how many lives has it cost to perfect these operations? Urology is the latest specialty in surgery, and gonorrhœa has been the largest factor in its development.

Other examples of the seriousness of gonorrhœa are found in gynecology. The author relates a case of death in childbirth due to the rupture of a pelvic abscess of gonorrhœal origin. He points out the well known advance of gonorrhœal infection in causing pyosalpinx; and calls attention to the frequency of ectopic gestation often ending in death, this anomalous form of pregnancy being increasingly regarded as traceable to constrictions and other damage to the fallopian tube by gonorrhœal inflammation.

But death is not the worst result of gonorrhœa. The chronic invalidism induced, the lifelong suffering and unhappiness, the marital infelicity often leading to divorce or abandonment are portrayed in all their hideousness by the series of cases which the author cites in detail. Syphilis, though ever so protracted and insidious being even hereditary, is never so malignant. Among the intelligent at least the syphilitic subjects himself more commonly to treatment, but gonorrhœa is regarded much more lightly. It may be formulated that syphilis prevails more in the unmarried state and among men, whereas gonorrhœa causes more destruction within the mar-

ried state and among women. Syphilis is moreover readily recognized, but about the presence of an old yet virulent gonorrhœa there is always doubt.—*Zentralbl. f. Gyn.*, 1905, 1471.

THEODORE J. GRAMM, M. D.

EXUDATIONS AND TRANSUDATION.—Effusion or the escape of fluid into a closed cavity of the body can occur either under the influence of inflammatory processes (exudation) or as the result of circulatory troubles and degeneration of its walls (transudation).

The transudations are almost always serous, rarely hemorrhagic. They have a very variable specific gravity, according to location, and can be ranged in the following descending order: Hydrocele, hydrothorax, ascites, anasarca, hydrocephalus. The specific gravity of transudations is nearly always much less than the inflammatory exudation of the same cavity.

The exudation may be serous, sero-purulent, purulent, sanious or hemorrhagic. The serous exudations have a specific gravity much greater than the simple transudation by stasis. We can accept that a fluid, no matter where found, is the result of inflammation, when its specific gravity is above 1018 (pleurisy, peritonitis) and that the same fluid should be considered a transudation by stasis, when the density:

in hydrothorax	is inferior to	1015
" ascitis	"	1012
" anasarca	"	1010
" hydrocephalus	"	1008

The amount of ashes, extractives, &c., contained in exudations and transudations vary slightly. On the other hand, the quantity of albumin they hold, differs greatly. In fact, the density of these fluids is in proportion with the albumin they contain. So we can appreciate approximately the amount of albumin by the specific gravity, according to the formula of Reuss:

$$E = \frac{3}{8} (S - 1000) - 2, 8.$$

E represents the amount per cent. of albumin and S the specific gravity, thus a specific gravity of 1018 indicates that the fluid contains 3.95% of albumin. These rules hold good for serous exudations, but not for the purulent, chylous or strongly hemorrhagic, neither for exudations present in cases of diabetes, cholæmia and uræmia. The serous exudations contain in round numbers 4.6% of albumin, the transudations 2% on an average. However, inflammatory exudations may be poorer in albumin in cases of pronounced hydræmia, and reciprocally, transudations may occasionally contain as much as 3% of albumin.

In taking the specific gravity the fluid must be the same as the surrounding temperature; for every increase of 3°C, the specific gravity is diminished by 1 degree. An exudation with the temperature of body still, has the specific gravity very much reduced.

The amount of albumin is determined by diluting a certain quantity of the exuded fluid (10 CCM) with ten times its volume of water, which should be heated to the boiling point. Add then, drop by drop, acetic acid, and dilute it until giving a slight acid reaction. The precipitate of albumin is collected over a small filter (previously dried and weighed), then

washed with alcohol and ether, dried at 100°C, and finally weighed. The weight of the filter is deducted from the weight obtained. The filtered fluid should be as clear as water and deprived of all traces of albumin (test made by the addition of a few drops of potassium ferrocyanid).

The serous exudations and transudations have an alkaline reaction. By standing, a more or less abundant fibrinous clot is formed. In the microscopic examination one finds leucocytes and inflated endothelial cells, often filled with vacuoles.

Purulent exudates show under the microscope a large quantity of leucocytes which belong almost exclusively to the polynuclear type. In old pus deposits we find them in a great measure degenerated or destroyed. Besides a large quantity of fatty granulations, crystals of fatty substances (margarin needles), and cholesterin tablets.

Serous exudates, principally of the pleura, are, as a rule, deprived of bacteria. Here and there, one finds rare streptococci or pneumococci, and if a tuberculous substratum exists, also tubercle bacilli.

Purulent exudates, especially those of recent formation, usually contain micro-organisms. In the purulent peritoneal exudate we find colon bacilli staphylococci, and streptococci, as well as gonococci.

In half the cases of pleural empyema, streptococci are present. In empyema with streptococci, found principally in puerperal fever, erysipelas, scarlatina, influenza, and sometimes also in tuberculosis, the pus is more liquid, flaky, and of serious import. The empyema following croupous pneumonia usually contains the pneumococcus of Fränkel, rarely the streptococcus. Empyema where the pneumococcus is present can be distinguished by the thick, greenish pus, and by its great tendency to open its way into the lungs, having then a favorable issue. In empyema of children, the pneumococcus is outbalanced by the streptococcus. Tuberculous empyema allows often to detect the bacilli of tuberculosis, either alone or associated with the streptococci. Staphylococci, colon bacilli and other micro-organisms are rarely present in empyema. A sanious exudate of greenish or brownish aspect and of a repulsive odor, is rich in micro-organisms, and among others contains the microbes of putrefaction. A hemorrhagic exudate is principally observed in carcinoma and tuberculosis of the pleura and in the hemorrhagic diathesis. A sanguinous effusion has no particular meaning.

The fluid of an echinococcus cyst is usually clear, neutral or alkaline, and of a specific gravity of from 1009 to 1015. It contains no albumin or only traces, but sodium chloride is present in large quantities, and frequently grape-sugar and succinic acid are found. The latter is detected when shaken up with ether the fluid previously heated and rendered acid by the addition of hydrochloric acid. After the evaporation of the ether, the succinic acid remains under the form of a crystalline jelly. If to a watery-solution ferric chloride is added, it gives a precipitate of succinate of iron, rust-colored and resembling bile. Heated in a test tube, the succinic acid escapes in the form of an irritating vapor which provokes cough.

The microscopic examination reveals frequently scolices and hooklets. In old vesicles with dead echinococci, as in ancient cysts, crystals of cholesterin and hematoidin are found. In cases of echinococcal suppuration

of the liver a large quantity of bilirubin is present, and this bile pigment imparts to the pus a yellow ochre color.

The fluid of hydronephrosis is clear as water and of a specific gravity from 1010 to 1020. It contains mucus, sometimes blood and pus and a variable quantity of albumin and urinary constituents. These may also be present in the fluid of the echinococcus cyst, hence the diagnosis of hydronephrosis can only be made when there is a large quantity of urea and uric acid. Both urea and uric acid should be looked for by the usual tests. Under the microscope we sometimes find pyriform epithelial cells from the calix and urinary casts.

The fluid of ovarian cysts is most frequently mucous, gently flowing, yellow; sometimes it is fluid, at other times colloidal and brown in color. Its specific gravity oscillates between 1003 and 1055, more frequently between 1010 and 1024. The fluid usually contains paralbumin, as well as pseudo-mucin or mucoide, which gives the mucous consistency to the exudation. Pseudo-mucin is not precipitated by acetic acid (as mucin), neither by heat or nitric acid, but alcohol throws it down in flakes. Heating with the mineral acids produces a reducing substance by dedoublement (dividing into two). To look for pseudo-mucin, the fluid should first be deprived of albumin by heating or acetic acid. The filtered fluid, if it contains mucin, is opalescent and flows gently. Alcohol in excess precipitates it into white flakes. These flakes are pressed, then heated with diluted hydro-chloric acid (5%) until a brownish coloration is produced. After cooling, render it alkaline by soda-lixivium, add a few drops of sulphate of copper solution, and heat it. If pseudo-mucin is present a precipitate of yellow oxydul of copper is formed. The diagnostic signification of pseudo-mucin is not important for two reasons: First, because it cannot be demonstrated in all ovarian cysts, and second, because it is sometimes present in rare cases of free ascitis. The microscopic examination shows occasionally cylindrical and vibrating epithelial cells, and sometimes colloidal granulations.—*Seifert and Muller, Klinische Untersuchung.*

E. FORNIAS, M. D.

THE RELIEF OF CERTAIN HEADACHES BY THE ADMINISTRATION OF ONE OF THE SALTS OF CALCIUM.—Roos calls attention to a certain type of headache not uncommon among women, and occurring occasionally among men. This form of headache is present and more severe on awaking, and tends to lessen in intensity or altogether disappear in from one to six hours. It usually manifests itself as a dull heavy ache or as a frontal or temporal throbbing. Less frequently it is occipital, vertical, or unilateral. Infrequently it is neuralgic. In its most typical form it is exceedingly chronic. It is associated and apparently dependent upon a deficient coagulability of the blood. The subjects of this chronic form of headache are usually of the lymphatic temperament. The expression is dull and heavy. The face is full and the eyes are often puffy. Some anæmia is the rule, and it varies in intensity from a slight pallor to an actual chlorosis. Associated with this headache we may find disturbances of the alimentary tract, cough, shortness of breath, palpitation, hæmic murmurs, slight albuminuria, amenorrhœa, urticaria and œdema. Disturbed sleep and irritability combined with lan-

guor. The author has treated a number of cases of this lymphatic type of headache, and tabulates fourteen of them *in extenso*. The treatment adopted was the administration of the lactate of calcium, in doses of 15 grains, combined with a half minim of tincture of capsicum, and one ounce of chloroform water, taken three times daily before meals. If the lactate of calcium is not available, the chloride may be given in its place. The author also pays attention to the condition of the bowels. Relief is obtained within a few hours after beginning the administration of the drug, though it may be delayed in exceptionally severe and obstinate cases for several days.

As the result of an experience of 48 cases, the author presents the following synopsis:

1. All cases conformed definitely to the lymphatic type of headache above described, and of these, 40 obtained complete relief and eight, considerable though not complete relief.

2. In four cases neuralgia occurred, two facial and two of the nerves of the lower extremities. In all, relief was coincident with the disappearance of the headache and the œdema.

3. In 23 cases there was pain after food. Of these, 16 found complete relief, and 7 partial relief.

4. In 22 cases dyspnœa occurred. Twelve were completely relieved; 9 partially, and one not at all. Shortness of breath has proved to be one of the most intractable of the symptoms.

5. Oedema of the eyes or extremities occurred in 21 cases, and of these 17 were completely and quickly relieved.

6. Chilblains occurred in six cases, and urticaria in two. All eight cases received complete relief of pain and swelling. A glossy erythema sometimes persisted for a considerable time after the chilblain had disappeared, but it caused no discomfort whatever.

7. Languor was practically always an accompaniment of this condition and one of the most astonishing results was the almost invariable improvement in mental and physical tone which followed the control of the morbid process conducive to hemorrhage.

8. Relapses occurred in eight cases due to the return of the patient to a careless method of living.—*The Lancet*, January 20, 1906.

MOSQUITOES AND GNATS.—Walter J. Hammond who has had considerable experience with mosquitoes in Brazil states that the best application to prevent such insect stings is a mixture of petroleum in a strong lather of soap. The proportion used by him was one part each kerosene oil and soft soap with six parts of water. An improvement was found in the addition of a little oil of lavender, which would remain after the petroleum evaporates. No injury seemed to arise to the skin, no matter how often the preparation was used and the slight discomfort felt was compensated by the immunity established against the assaults of the insects and the attendant dangers.—*Red Cross Notes*.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY JOHN HUTCHINSON, M. D.

"CASE AND PATIENT."—We speak of a beautiful case of smallpox or of typhoid fever, examining all of its manifestations with the keen enjoyment the botanist does a new plant. To the poor patient these manifestations are not enjoyable at all. He demands attention, his sufferings are very real to him, and he very much underrates the privilege of being the medium of growth for these bacteria whose life cycle is so full of interest to us. The chances are that while we are absorbed in the "case," the patient, the man who demands relief and who expects and deserves our sympathy and attention, will call in someone with perhaps less of science but more of humanity who will give him what he desires, human sympathy, courage and relief. Let us keep in mind the difference between "patient" and "case" and govern ourselves accordingly.—*Milwaukee Medical Journal*.

SABADILLA.—Miss E., aged twenty-three, bookkeeper, rather tall, thin, but counting herself in good health, complained of a single annoying symptom of long standing as follows:

Since her fourteenth year had suffered from attacks of sneezing and lacrymation. The slightest change in temperature, the most trivial irritation, would bring on violent paroxysms of sneezing, lacrymation and watery coryza. Going from one room to another, a draft, the opening of a door, the chilling of the hands or a bright light striking the eyes were any of them sufficient to precipitate an attack, and when such exciting causes appeared to be lacking, occasional attacks would come on anyhow. There was no organic catarrh, no discharge (except at the time of the paroxysm), no symptoms of any kind left afterwards. No headache, no menstrual trouble, no pains, no aching, no modalities except as above mentioned in regard to the sneezing.

Sabadilla 200, a few powders, cured completely and permanently—J. B. S. King, M. D., in *The Critique*.

THE UNTOWARD SYMPTOMS INCIDENT TO THE USE OF ANTITOXIN.—Nearly every one, at one time or another, has met with untoward symptoms following the use of antitoxin. As a rule, these symptoms appear in the form of more or less distressing urticarias, myalgias, arthralgias and erythemas,

but occasionally there may be seen marked cyanosis, syncope and collapse. None of these cases seem to have had a fatal outcome, but the symptoms may be extremely alarming, and we may well ask what is their underlying cause. We know that the repeated injection of serum from one animal into an animal of a different species gives rise to the formation of precipitins in the serum of the injected animal. That is, if the clear serum of the injected animal is mixed with a small quantity of serum coming from an animal of the same species as that which furnishes the serum for injection the resultant mixture soon becomes turbid owing to the formation of a precipitate. It has been noticed that the untoward symptoms following the use of anitoxin frequently increase in severity with the increase in the number of injections. This fact gave rise to the suspicion that these symptoms may be dependent on the formation of precipitins in the serum of the patient. The supporters of this theory believe that the reaction between the horse serum and the patient's serum gives rise to the formation of emboli which occlude the finer capillaries and thus produce the accidents incident to the use of these serums. The researches of Hamburger and Moro, Arthus, Francioni, Rovere and others point toward the correctness of this theory.—*Editorial Jour. A. M. A.*

THE NEW ENGLAND MEDICAL GAZETTE says: We are glad to learn all that we can concerning our confreres in various parts of the world. From our only homœopathic Russian journal, the *Homœopathic Physician*, we abstract the following, it being part of a list of the "Urgent Needs of Homœopathic Physicians" in that country:

"7. To cleanse homœopathic medicine from the malignant growths formed on it in the shape of 'Electro-Homœopath,' the 'methods' of Finella, etc., which awfully defiled true homœopathic medicine. The inexpert public identifies those 'methods' with pure homœopathy. It is necessary to explain to the public the true principles of homœopathy by way of lectures, pamphlets, articles in the current journals, and in many other ways. On more than one occasion I had to argue with my patient that 'canceroso,' 'Scrofuloso,' and all that rubbish by no means belong to homœopathy."

"8. It is necessary to support the only homœopathic publication in Russia, the *Homœopathic Journal* by participation in it, as well as by spreading it among the public."

Surely this advice can have an application at points less distant than Russia as well as in that country.

THE VALUE OF DRUGS IN THERAPEUTICS.—Frederick C. Shattuck, M. D., Boston, Jackson Professor of Clinical Medicine at Harvard University, addressed the Boston Homœopathic Society, March 1, 1906, his paper bearing the foregoing attractive title. In it he said:

It seems to me that the leading therapeutic principles can be stated somewhat as follows:

First. Do no harm. This principle seems to be well met by the homœopathist who uses the infinitesimal dose. He does no harm save in so far as he may miss doing good.

Second. Try to see as clearly as possible just why you give a drug, your

purpose in giving it, whether as a specific, curative, palliative, or as a placebo.

Third. As far as you *can* give a drug uncombined. This is a general rule subject to many exceptions. Rules, however, are made to break. They are our servants, though we too often allow them to be our masters. But in breaking rules we must use our brains, an exercise which most of us avoid as far as we can.

Fourth. In using an efficient drug be as sure as you can of a good preparation, and then give it until something happens—either the desired effect or evidence appears that the limit of toleration has been reached—what is called the physiological, but what I should prefer to call the toxic effect. Disregard of this law, is, I believe, responsible for many therapeutic failures.

[With due respect to the Professor, we believe that he does not know what he is talking about when he suggests that the infinitesimal dose can do no harm. We would prefer that he give its masters credit for intelligent use of the dose.]

HYDRASTIS CANADENSIS.—Hydrastis is a slow, deep acting remedy, required in many trophic disturbances, where there is emaciation, catarrhal conditions and ulceration, even malignant ulceration. Defective assimilation. When it is noticed that the stomach is the center of most of the symptom complex. The desires and aversions often give the key to a very complex totality of symptoms. In this remedy the sinking empty hunger with loathing of food is striking, strange, rare, and therefore peculiar. It is characteristic because it is a general of the remedy, and is predicated of the patient. Great weakness prevails at all times. Catarrhal symptoms with thick, viscid, ropy, *yellow* mucus, sometimes white, from any mucous membrane, with or without ulceration. Deep eating spreading ulcers upon the skin or mucous membrane, with thick, viscid, yellow pus. Induration in glands, in base of ulcers. False granulations that bleed much and easily, on the slightest touch. This remedy has been very useful in the treatment of malignant ulcers. In such ulcers it is often a great comfort to the patient, even when it does not cure, as it removes the offensiveness, modifies the pain and restrains the destructiveness. The burning so commonly found in such ulcers is a strong symptom of Hydrastis. When the weakness and emaciation have progressed together for months and years in chronic stomach disease, fainting comes on, and this is also found in Hydrastis. In chronic disease, when the tissues have suffered and not the mind. The astonishing absence of mental symptoms except the general discouragement incidental to long suffering and weakness is striking. If it were carefully proved, most likely the mental loves and hates would come out.—James Tyler Kent, M. D., in *The Critique*.

APIS MELLIFICA.—Remember, the great apis objective symptoms. Skin waxy, edematous, puffy, the pallid face, the nettle rash, the enlarged glands, imperfectly developed or suppressed acute exanthema, as measles, scarlatina, often shown first in the puffy swelling under the eyes, the dropsy of hands and feet, the diarrhea, the right-sided affections of ovary or testicle, the suppressed urine laden with albumen and tube casts.

Remember the subjective symptoms: the suffocation, the nausea and deathly sickness, the tightness of chest, the desire for cold air, the aversion to heat; the fidgety, jealous, discouraged state; the extreme sensitiveness to touch, the soreness, the burning and stinging, the constriction, the modalities, especially cold bathing.—Chas. Ott, M. D., in *The Med. Forum*.

BENZOIC ACID.—The following testimony strikes us as amusing, inasmuch as it shows the state of mind of somebody who is supposed to know:

Dr. Vaughan stated in his testimony (page 65) the following:—

"I am sure that benzoic acid in the quantities in which it is used in tomato catsup, sweet pickles, etc., one part to 1200 or 2000, does not do any harm. I should be opposed to the use of formaldehyde in milk in any quantity or the use of any other preservatives in milk. I have testified repeatedly against the use of sulphite of soda on hamburger steaks."

Again on page 66, referring to our own experiments in Washington, he says:—

"But they have not shown that boric acid in the small quantities which should be used as a preservative, if used at all, has any effect on the animal body."

Mr. Adamson.—What do you mean by small quantities?

Mr. Vaughan.—I mean one-half of one per cent.

When asked by Mr. Mann how much benzoic acid you can eat, Mr. Vaughan stated (page 72):—

"I would have to answer only in a general way, and say a grain or two, I am sure, taken day by day for one's life, would not do one any harm."

Mr. Mann.—Do you mean one grain or two grains?

Mr. Vaughan.—One grain.

Mr. Mann.—Would two grains do any harm?

Mr. Vaughan.—Well, I do not know. I should say one grain would be perfectly safe. I do not know whether two grains would be or not.

—H. W. Wiley in *The American Journal of Pharmacy*.

FOREIGN LITERATURE.

CONDUCTED BY E. FORNIAS, M. D.

CARDIAC THERAPEUTICS.—Dr. Dahlke, of Berlin, is giving us in the *Zeitschrift des Berliner Vereines Hom. Aerzte*, a complete list of our cardiac remedies and their indications. From this extensive list I take digitalis as an example of his work. He considers this remedy one of the leading ones, and indicated in both acute and chronic, as well as in functional or organic troubles—Endocarditis and Pericarditis, in the course of acute articular rheumatism or other affections, demand its consideration. Pain in the left shoulder with general malaise and anxiety without agitation, are additional indications. Organic cardiopathic conditions complicating hepatic disease (induration, icterus) call also for digitalis, which is likewise

applicable to chronic heart troubles (valvular disease), with edema and dark scanty urine.

In hepatic complications compare Aurum and Magnesia.—Fatty heart. Frequently called for in bronchial complications (persistent cough, bloody sputa, rattling in the chest). Angina pectoris. Palpitations of nervous individuals, after violent emotions, and in onanists, suffering from atonic pollutions, against which digitalis is an efficacious remedy.

The leading symptoms indicating this drug are: Dyspnoea, constant need to breathe deeply and precordial distress. Fear of suffocation when swallowing greedily, while sleeping. When falling asleep the breathing seems to stay away. Feels better when lying on the back. Sensation as if the heart would stop beating, when moving, with great anxiety. Fluttering of the heart, stitches and sensation of oppression. Feebleness and numbness of the left arm. Feeble, irregular, intermittent pulse. Pulse very slow, but becomes accelerated by any effort or motion, especially on the act of rising from bed. This last peculiarity of the pulse is characteristic of digitalis. Also a capital remedy, when in connection with heart trouble, the patient has dreadful dreams, or dreams as if he were falling from a height, or if on waking he feels confused or as if he had been struck with a club. As to the form in which this remedy should be given, he prefers the maceration made of the fresh leaves. Others give in preference, the trituration of digitalis, especially in Angina pectoris.

E. FORNIAS, M. D.

DIGITALIS, METHODS OF ADMINISTERING AND CONTRAINDICATIONS.—

Dr. P. Jousset in his "Nouvelles Leçons de Clinique Médicale," makes a careful analysis of the preparation of digitalis which has given better results in the treatment of asystolia, and of those cardiopathic conditions in which this remedy is counterindicated. He starts by stating that unquestionably crystallised digitalis is more active and sure in its action than the macerated leaves of the plant, which he employed before he tried the solution of digitaline of Mialke, which is as effective as digitaline, but requires a longer time to act and its action is not so lasting. He claims that it is difficult to obtain leaves of uniform action, and besides the maceration produces vomiting more frequently than digitaline. He calls our attention to the fact that crystallised digitaline is yet called chloroformic because it is thoroughly soluble in chloroform. There are two amorphous digitalines, one incompletely soluble in chloroform, which should be rejected; the other completely soluble has the same activity as the crystallised digitaline. He prescribes of the latter XXX to L drops of a 1-1000 solution, to be taken twice a day, in cases of classical asystolia, and claims that with this dose, at the end of 24 hours an active diuresis is produced, running from two, three, four or more litres daily and continues without a new administration of the remedy. Crystallised digitaline can be administered in two different ways: a massive dose of from XX to LX drops (50 drops represent one milligramme of digitaline) given twice a day, and repeated when the diuretic effect stops, that is after six or twelve days; or in a habitual manner a smaller dose (six or ten drops daily) and the duration of the suspension to be guided by the quantity of urine passed. I am in the habit, he

says, of prescribing these small doses for eight days, and to stop them until the diminution of the urine indicates the necessity of resuming them again. Huchard asserts, that in cardiac affections, the quantity of urine passed, is to them, what the thermometer is to fever. This interval of rest should last from four to eight days, and sometimes more, according to the case. This manner of administering digitaline is applicable to valvular disease, where compensation is not very stable, and which, due to this continued treatment for years, may result if not in a cure at least in a condition more or less approaching the normal. When asystolia is complete, larger doses are necessary. Sometimes we meet with cases in which digitaline is absolutely ineffective and this inefficacy of the remedy is usually explained by a far advanced state of degeneration of the muscular fibres of the heart, but more frequently there is a tendency to renal complication and symptoms of uremia.

The renal complications are principally observed in valvular affections of arterial cardiopathies, because they are a common lesion of arteriosclerosis. Arteriosclerosis, involving the coronary and producing degeneration of the cardiac muscle, determines the alteration of the sigmoid valves and narrowing of the aortic orifice. When localized in the kidneys, it induces interstitial nephritis, and renal insufficiency, which is produced whenever the kidney becomes the seat of an inflammatory recrudescence. We often meet with cases in a state of incomplete asystolia with more or less pronounced anasarca, and in which the symptoms of uremia come to complicate the cardiac disorders. When this concurrence of symptoms exists, digitalis remains ineffective; far from producing diuresis, it increases oliguria; and if one insists on using it, it will not be long before we come to observe the symptoms of digitalic asystolia superadded to those of cardiac asystolia. If we wish to understand the inefficacy of digitalis in these cases we need only remember its action in valvular asystolia; it increases the energy of the heart's beats, raises the arterial and lowers the venous pressure. This lowering of the venous pressure renders possible the absorption of the dropsical effusion (in cases complicated with anasarca), the fluids diverting to the kidneys and producing diuresis. But if the kidney is insufficient, if it is to a certain degree impervious, it constitutes a sort of barrier to the flowing of the fluids, and diuresis is of course impossible. In such cases digitalis is ineffectual. This is the theory of Huchard, but it is incomplete, as there are less intense cases of asystolia without anasarca in which digitalis produces a considerable diuresis. Let us then say, in a more general way and more correct, that diuresis, in those cases, is the result of an increased arterial pressure, and that when the kidney is impermeable, as the arterial pressure cannot effect diuresis, digitalis is ineffectual. Consequently our efforts should be directed first to the unsound kidney in order to render it pervious, and then this remedy may prove beneficial. Huchard mentions several other conditions equally opposed to the action of digitalis. Cardiac liver, when it goes beyond congestion, is, according to him, an absolute contra-indication of the remedy. Repletion of the vessels, which imposes on the cardiac muscle a labor of which it is not capable, also renders its employment undesirable. Likewise, in contraction of the peripheral vessels, digitalis would so excite the heart, as to become incapable

to overcome the impediment brought about by this condition. When renal disease contra-indicates digitalis, we should consider cantharidis and calomel; the latter, especially, when the diuretic trouble is of hepatic origin. In several cases with lung complication, characterised by numerous moist rales, prolonged expiration, dyspnoea and cough, the administration of arsenic, 3 trituration, has rendered him valuable services, producing a diuresis of 3 to 4 litres.

E. FORNIAS, M. D.

DIAGNOSTIC VALUE OF DIGITALIS.—Among the drugs employed in diagnosis, Seifert in Germany, and Abrams in this country, mention digitalis. From the latter author I copy the following: "This drug, by slowing the action of the heart, is of value in irregular action of that organ, to determine the time of a murmur, should this be present. At the same time, by increasing the force of the heart's action, it will render cardiac murmurs more distinct, inasmuch as the intensity of a murmur is dependent on the activity of the heart. Fluid in the pericardium may be an exudation or transudation. Digitalis, by increasing diuresis, will often cause the resorption of the latter, leaving the former unaffected. Resorption is noted by a diminution in the area of præcordial dullness. In tachycardia, resulting from vague paralysis, the heart does not respond to digitalis."

E. FORNIAS, M. D.

EFFECT OF DIGITALIS ON BLOOD PRESSURE.—The above author gives us some very interesting tables recording the measurements of blood pressure which seems to show that, when arterial tonus is eliminated by amyl nitrate, digitalis has no effect to raise blood pressure; in other words, the high blood pressure following the use of digitalis is "illusory," and is compensatory to increased peripheral resistance, as stated above, instead of representing drug action. "This action is not uncommon in the administration of digitalis owing to its constrictor influence, and when the latter action implicates the coronary blood vessels the nutrition of the heart must suffer." The action on the heart of the digitalis substances is to increase the work of both ventricles, but, in not a few instances, increased work on the part of the left signifies an increased blood pressure, which is very often an undesirable condition, as in nephritis and arteriosclerosis.—(Conklin.)

E. FORNIAS, M. D.

SUBSTITUTES FOR DIGITALIS.—The experiments of Dr. P. Jousset with eel-serum on rabbits have demonstrated the rapid action of this preparation on the kidneys. After twenty-four hours, a renal inflammation with albuminuria and hematuria developed. It produced an abatement of the cardiac pulsations during the first quarter of an hour after its injection, and this abatement lasted sometimes one hour. The muscular fibres of the heart presented signs of degeneration, but the lesions were more particularly marked in the kidney and liver. The serum of the eel is a medicament which firstly and principally attacks the kidneys; the lesions on the cardiac muscles being much less pronounced. He was led to its employment in chronic valvular disease by its analogy with the poison of the viper, which experi-

mentally has produced cardiac lesions similar to those of this serum. He has prescribed this remedy in place of digitaline, and in cases of instable compensation and of impending asystolia. The action of this serum is shown by the increase in the quantity of urine passed and by the amendment of the sphygmographic tracings. He recommends the first decimal trituration, 25 centigrammes in 200 grammes of water, three tablespoonfuls daily.

Another remedy mentioned by Dr. P. Jousset as a substitute for digitalis in asystolia, is the *cratægus oxyacantha* or aubepine, a plant of the family of rosacea. He states that in certain cases it has given remarkable results, while in others its use has been nugatory. No rules can be given for its employment, which has been entirely empirical. However incomplete, the experiments have to a certain point, explained its favorable action in asystolia. The presence of propylamin, or better, trimethylamin has been discovered in this plant; a substance derived from amin or amonical compounds, and which we know, produces in healthy individuals, at an average dose, a diminution in the frequency of the pulse and a lowering of the blood pressure and temperature. This information, though incomplete yet, shows nevertheless that aubepine acts upon the heart.—*Clinique Medicale*.

E. FORNIAS, M. D.

ASYSTOLIA, according to Lefort, is a pathological condition due to impairment of the cardiac contractions. Whatever cause diminishes the force of the contractions of the heart produces asystolia (valvular lesions, dilatation, fatty degeneration, myocarditis, pericardial effusions or adhesions, prolonged efforts, heart exhaustion (*cœur forcé*) and the emotions). The degree of resistance of the peripheral capillary system frequently intervenes in the production of asystolia (Potain). It occurs in many cardiac affections without valvular lesions (Bernheim). Asystolia is to the heart what grave icterus is to the liver, or what uremia is to the kidney (Rigal). From the interruption of the equilibrium between a lowered arterial and an increased venous pressure we have as a result, venous stasis in the liver, kidneys and brain, pulmonary and malleolar edema, anasarca; serous effusions into the pericardium, peritonium and arachnoid; the diminution and alteration of certain secretions (anuria, albuminuria); sub-delirium, dyspnea, and subicteric coloration. The asystolic paroxysms appear without premonition, after efforts or fatigue, colds, and excesses at the table, or are preceded by pulmonary or hepatic congestion; sometimes by a special malaise, with anorexia and somnolence. During the crisis we observe, besides the anasarca, orthopnea, anguish, cyanosis, weakening and acceleration of the cardiac murmurs, disappearance of souffles previously existing; smallness and irregularity of the pulse, false intermissions, due to the fact that the systolic wave is arrested before it is felt at the radial, and finally the venous pulse, the result of a relative dilatation of the right auriculo-ventricular orifice. The attacks last several days, and become more frequent and serious with time. The myocardium grows soft and degenerates, the general nutrition declines, and as a consequence we have ulceration and gangrene of the tissues, uremia, delirium and coma, constituting the cardiac cachexia. During the course of an attack, death may result from syncope,

asphyxia or cardiac collapse. The prognosis rests with the cause, the state of the myocardium and the hygiene of the patient. With this class of patients the milk diet is an imperative necessity. We should bear in mind that repeated attacks of asthma may induce asystolia, and that the edema and serous infiltrations of Bright's disease and alcoholic cirrhosis, should be carefully distinguished from cardiac edema. Under a prognostic and therapeutic point of view, the diagnosis of the cause is of supreme importance.—*Pathologic Interne*.

E. FORNIAS, M. D.

CHLORIDE OF SODIUM WATERS IN THE TREATMENT OF LOCALIZED TUBERCULOSIS.—(Dr. Paul Reynier in *La Tribune Medicale*.) Having been impressed by the improvement and occasional cures effected, in cases of localized tuberculosis, by repeated and prolonged sojourn at the chloride of sodium springs, I was led to employ a solution of the salts of these waters in the treatment of cold abscess, adenitis, tuberculous arthritis. The results obtained were so encouraging that I feel it my duty to describe this therapeutic procedure.

In cases of cold abscess, suppurating adenitis, after evacuating the pus with an aspirating needle, I irrigate the sac, through the trocar, which has been left in place, with a solution consisting of three to four tablespoonfuls, about 60 grammes, of the mother waters of saline salts, or any other similar water, added to a litre of ordinary water. This solution is boiled and filtered.

In adenitis, after the abscess has been incised, I irrigate the cavity with this same solution, then dress the wound with sterilized gauze saturated with the salt water, which is made stronger or weaker, according to the sensitiveness of the skin.

In fungous arthritis, the articulation should be enveloped with absorbent cotton saturated with the solution and kept moist by means of oil silk covering. If the lesion is situated on the arm, the latter should be immersed for from five to six hours in a fish kettle containing the salt solution; these immersions should, if necessary, be continued for months, until the lesions are improved or even cured.

By this method I have cured cases of fungous arthritis of the elbow, wrist, hip, adenitis and tuberculous abscesses.

These waters act as an adjuvant to surgical treatment. In certain resections of the joint, after the bone lesion had been removed and the fungosities, notwithstanding the great care exercised, could not be thoroughly cleansed, these baths or irrigations of salt water have effected a complete cure.

These facts are, moreover, corroborated by the experimental work of Quinton and Fourniol "to determine the favorable action of subcutaneous injections of salt water on tuberculous subjects."

The saline solution I use is in all cases more concentrated than that used by these experimenters, for they diluted sea water until it was isotonic, and it is probably due to this fact that I have obtained better results with chloride of sodium waters in treating my cases of local tuberculosis manifestations.

THE HAHNEMANNIAN MONTHLY.

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SOME VEGETABLE PARASITIC SKIN DISEASES.

BY

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THE six cases described in this article have lately been under my care, and represent severe types of their respective diseases. While some are very rare, all are pronounced in character. A brief description of the disease, the specific case and its treatment, will be given.

BLASTOMYCOSIS.

This chronic, inflammatory and infectious disease usually starts as a papule, which is more or less indolent. A pustule in time appears, to be followed by peripheral enlargement. A sharply outlined verrucose patch results, the base of which discharges a sero-purulent excretion, while along the sloping borders are found many minute abscesses.

Resolution may be gradual or spontaneous, and usually starts in the centre, when peripheral onset seems to have reached its maximum. The casual factors are the blastomycetes, parasites with round, oval, or irregular bodies having well-defined capsules and marked granular protoplasm. They can be found in the minute abscesses mentioned. Our knowledge of this rare disease, of which only about fifty cases have been recorded, we owe chiefly to American investigators.

Figure 1. Patient is a Russian woman, twenty-two years old and single. Family history negative. Personal history previous to present illness shows that she has had measles, typhoid fever and appendicitis, but presents no details bearing on



FIGURE 1. BLASTOMYCOSIS.

the present condition. Before her admission to the Metropolitan Hospital she reports a profuse mucous discharge from the mouth, worse at night with inability to swallow. On admission, the hemoptysis, hoarseness and dysphagia were marked

and no urine had been passed for three days. For an indefinite time, a papule had been present on the chin, which now enlarged and ulcerated in the centre. This patch, which eventually became as large as a silver dollar, was elevated and fungoid in character, reddish in color, and soft and painful to touch. About the time of admission two small areas were discovered on the inner aspects of both thighs. These spread rapidly at the periphery, always being sharply defined and verrucose in appearance. Soon the entire vulva, perineum and mons veneris were involved, and eventually the diseased area spread upon the abdomen, half way to the umbilicus, and out upon the thighs, as shown in the photograph. The typical abscesses are plentiful about the edges, and the discharge profuse, offensive and excoriating. Three weeks after onset of the above lesions, the patient scratched her axillæ, and shortly both presented a typical fungating elevated red mass. The patient's condition two months after admission, was most distressing, due to constant pain, poor appetite and melancholia.

Treatment consisted of dietary measures, plus arsenicum iodatum 3x internally, and the constant local application of permanganate of potash solution, 1 to 1,000. Later the iodide of potassium, saturated solution, 5 to 20 drops, three times a day was given internally, and a five per cent. ammoniated mercury ointment applied locally. After two and a half months' treatment, the chin is well, the axillæ are much improved, and while the main mass about the vulva has not improved appreciably, the fungoid character has disappeared, and a few clear areas are present. X-ray treatment, which was desired, could not be instituted, because of the distress occasioned by the removal of the patient to the electrical department.

ACTINOMYCOSIS.

Actinomycosis of the skin is usually secondary to that of some deeper structure, and is essentially chronic; the skin eruption taking months or years to develop after the original infection, which usually takes place through the mouth, particularly through a decayed tooth, although it may occur in other parts of the digestive tract, or in a respiratory tract, or rarely by direct skin infection. The jaw, neck and face are the favorite seats of the lesions, but a more or less general distri-

bution may occur. A dry, scaly erythema may appear first, although it is the rule that the primary lesions should be deep subcutaneous nodules or tumors. The skin covering these growths becomes dark red, and as the disease spreads, one or many points open, discharging a thick purulent, and later a sero-sanguinous fluid, which contains the small yellow masses mentioned below.

As the tumors soften, burrowing takes place, and fistulous tracts are formed which may be inches in length when fully developed. Hence, we have a condition presenting hard and soft nodules, some of them about the orifices of the sinuses, superficial and deep tumors, some rising to the height of an inch above the skin surface, diffuse dusky-red erythema and scales and crusts galore. Rarely the tumors remain hard and the skin surface is not broken, or they may rupture into a blood vessel and the infection be taken into some internal organ. The primary internal infection is much more common than actinomycosis of the skin, and may cause fistulous openings upon the skin without otherwise affecting it. Swelling of the lymphatic glands occurs only from pus infection, because unmixed actinomycotic infection does not tend to involve the lymphatics.

The cause of this disease is the ray fungus, so called by Hartz, because of its macroscopic appearance; it appears grouped in yellowish bodies visible to the naked eye. When stained by the Gram method these small bodies are shown to consist of mycelia, which interlace centrally and give off threads which radiate from the centre and end in club-shaped enlargements, which are supposed to be the fructifying portion of the fungus.

Figure 2 presents the disease in its worst form and greatest involvement. Patient an American of fifty. Duration of the skin eruption was eighteen months, although the original infection occurred some months before from handling a horse with lumpy swellings on the legs. The eruption first appeared on the right leg as an erythematous scaly patch, then spread to both legs and feet, showing nodules, subcutaneous sinuses and tumors, crusts and pustules. It was almost impossible for the patient to remain on his feet any length of time, and indirectly his general health was much affected by his local condition, which is contrary to the average experience of those afflicted with the disease. Microscopic examinations of the discharges revealed the actinomyces in large numbers.



FIGURE 2. ACTINOMYCOSIS.

Treatment consisted of the continuous application of peroxide of hydrogen one part to two of water, and the irrigation of the sinuses twice daily with the same solution. Internally the

iodide of potassium 15 to 75 drops daily was given for nearly a year, except for a few days at intervals, when *calcareo fluoricum* 6x was administered.

A complete cure resulted in eleven months' time; nothing but the stains and scars now being present.

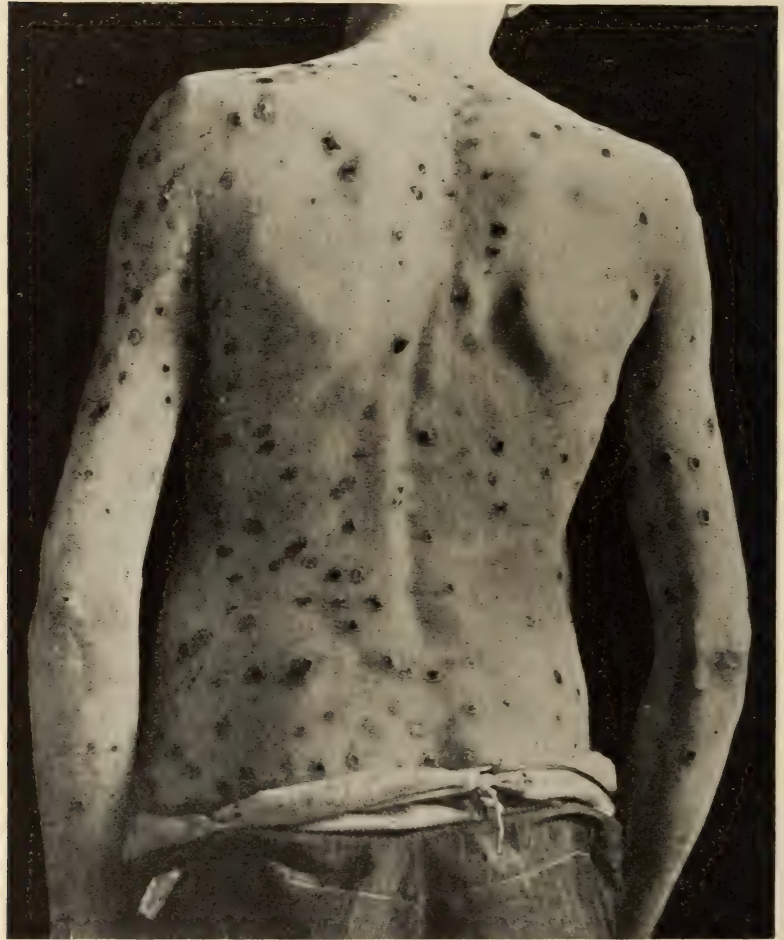


FIGURE 3. ECTHYMA.

ECTHYMA.

This disease is essentially one of filth and neglect, and is not rare among those subject to these conditions. It is characterized by the appearance of few or many large discrete flat pustules, situated on an indurated base, surrounded by a

marked hyperæmic areola. Brownish-black, bulky and firmly-attached crusts form, underneath which may be found smaller spots of ulceration. Slight traumatisms, insect bites, scratching, in fact, any irritation of the skin, may afford the chance for the streptococcus to invade skin deprived for the time being of its normal resisting power, because of bad dietary and hygienic surroundings.

Figure 3. The patient, a German laborer, aged thirty-one, was admitted to the Metropolitan Hospital for alcoholism. The only item of interest in his family or personal history was the beer tendency from youth up. No specific history. About three weeks before admission a papulo-pustular eruption appeared on his legs and soon spread over the entire body. The lesions were discrete, each was surrounded by an areola of redness, and their size varied from a small pea to a silver quarter dollar. When the lesion became dry, the itching was intense and always worse at night and from warmth. The crusts were large, thick and blackish.

This case made a complete recovery in a few weeks under the daily application of sulphur ointment (officinal strength), and the internal medication of mercurious protoiodide 2x tablets, one, four times a day.

TINEA VERSICOLOR.

Owing to the fact that it gives so little annoyance to its owner, and hence is neglected, this parasitic disease exists for years before removed by the proper treatment. People have been known to possess it for a life time and thought they had liver spots. Heat, as furnished by the warm parts; darkness, as afforded by the covered parts; and moisture, as caused by the freely-sweating parts of the body, are the necessary adjuncts to the development and proper life of tinea versicolor.

A parasite, the *microsporon furur*, is the causal agency, and while similar in appearance microscopically to the ring worm fungi, the differential points are perfectly plain.

Inasmuch as the history of any typical case will suffice to illustrate the characteristics of this disease, the history of Figure 4 will be briefly mentioned. Patient is a German of twenty-eight years. About fourteen years ago the eruption appeared on the chest, as small, flat, yellow-brown spots, with slight itching and some scaliness when scratched. Gradually

some of the lesions coalesced forming patches, but many remained discrete. As the disease aged, it spread over the entire trunk, on the arms, and up the neck to the hair line, and down upon the legs. Such extensive involvement is very rare.

The patient was instructed to wash himself daily with hot



FIGURE 4. *TINEA VERSICOLOR.*

water and soap, then to apply pumice stone carefully to all the areas affected, and finally to rub a saturated solution of the hyposulphite of soda into the skin. So zealous was he, that something deeper than the fungus came off. As he improved, the treatments were given at greater intervals, and in a few weeks' time a cure resulted.

ELEPHANTIASIS.

Briefly stated, elephantiasis is a chronic enlargement of certain regions of the body, arising from local obstruction to the flow of blood, or lymph, or both. There are two distinct forms. The endemic is formed in tropical countries, and is chiefly due

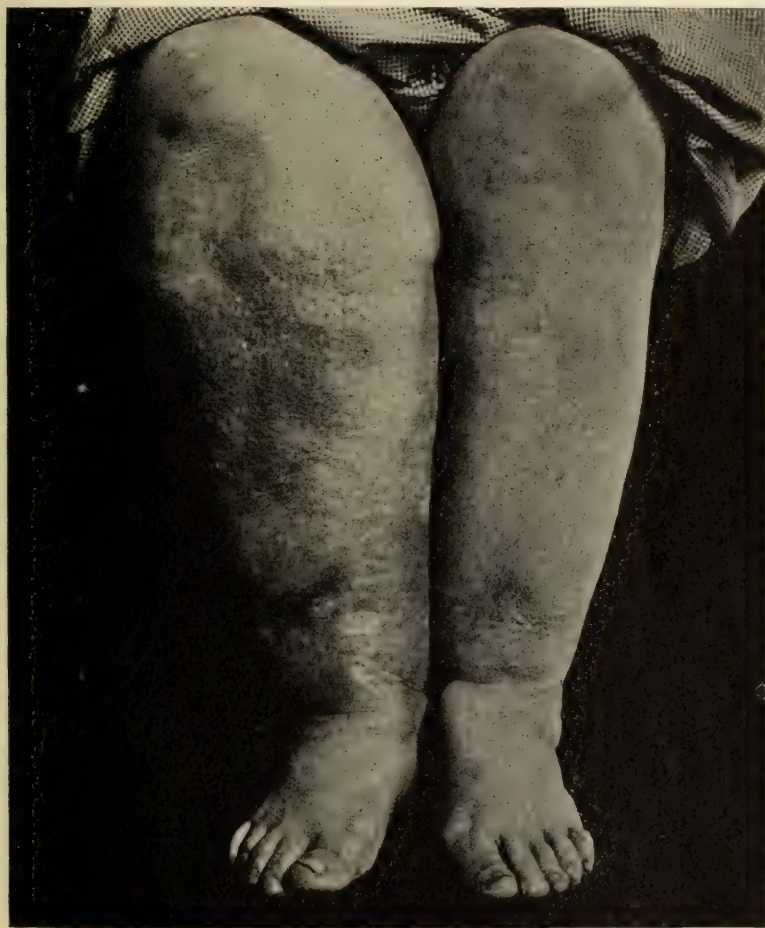


FIGURE 5. ELEPHANTIASIS.

to the blocking of the lymph vessels by the *filaria sanguinis hominis*. The sporadic type occurs in temperate climates from obstructions of the lymph, or blood vessels, due to growths or inflammatory indurations. There is nothing parasitic in

the nature of this latter type, but the disease is usually classified with the vegetable parasitic conditions, and both forms are considered together because of similar pathological changes.

Figure 5. Patient is a German woman, age forty, whose family and personal history are negative, except for the detail to be related. She has given birth to fourteen children, of whom nine are now dead. At the birth of the fourth child some eighteen years ago, the right leg became swollen from pressure upon the veins and lymphatics and so-called "milk leg" developed. Although this condition partially disappeared after the birth of the baby, each successive pregnancy made the condition worse, until it became permanent. There was no chance for recuperation, because the babies came so thick and fast. At the present time there is a relative enlargement from the knee to ankle of right leg, being about twice as large in circumference as the left leg at any given portion. There have been ulcerations and eczematous changes at different times, while the whole affected area is reddish-brown in color, rough, dry and indurated.

The patient was not in the hospital long enough to test any kind of treatment; in fact, she did not enter because of this condition, but because of a leg ulcer. Elevation of the leg, and the use of *calcareo fluorica* were recommended for home treatment. The prognosis is necessarily poor for recovery of shape and size of the leg, but not as regards life.

LEPROSY.

This disease, one of the oldest in the annals of the human race, has existed endemically in various parts of the earth for many years. Improved methods of sanitation and segregation have done much to lessen its prevalence in civilized countries, but it still thrives in China, India, the Philippine and Sandwich Islands, and Iceland. Sporadic cases may be found anywhere, but are usually limited to those born in, or resident, for several years, in a leprous country. Of the five cases in my service at the Metropolitan Hospital three are Chinamen, one a Pole and the other a Dane, who resided for years in the West Indies.

Briefly stated, leprosy is a chronic, contagious disease, due to the *lepra bacillus*, insidious in its onset and characterized by the occurrence of erythema, anæsthesia, pigmentation, nodules,

atrophies, ulcerations and deformities. It usually results in death, although the patient may live for ten or fifteen years. There are two principal types, the tubercular, chiefly involv-

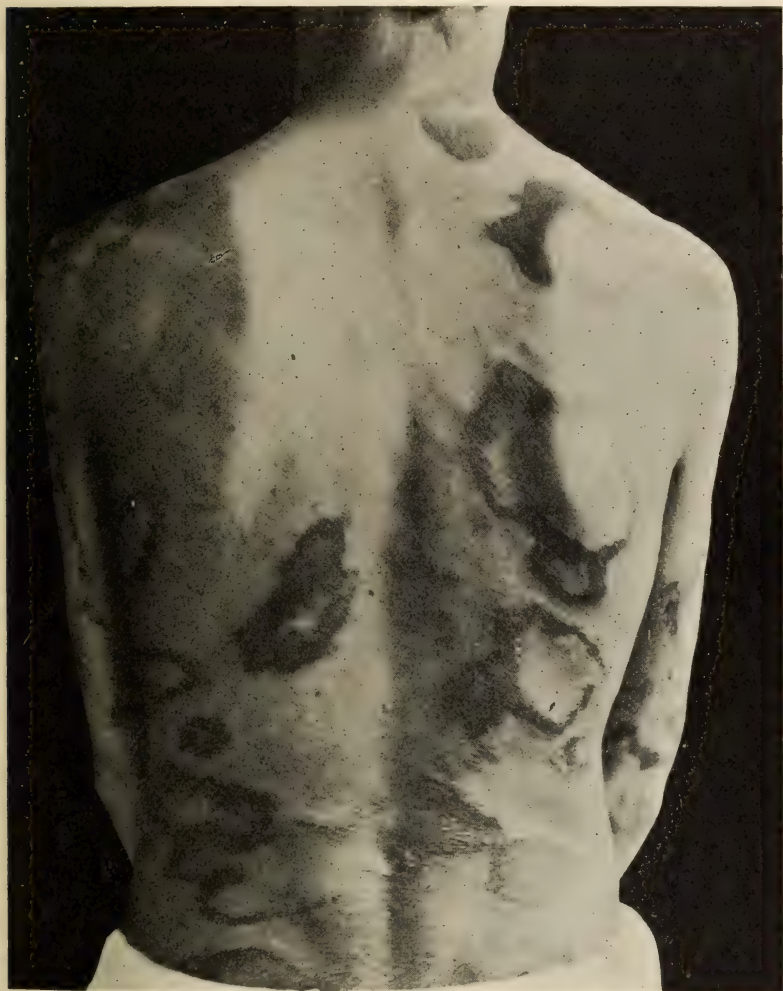


FIGURE 6. LEPROSY.

ing the skin and mucous membrane, and the anæsthetic, chiefly attacking the peripheral nerves.

Figure 6 represents a Chinaman, age twenty-one, who came to this country in 1890. Family and early personal history are absolutely negative. Four and a half years ago, while resid-

ing in Mott street, New York City, patient noticed a few light red spots on right cheek, upper lip, left cheek and on forehead; spots steadily continued to increase in size and number, and to coalesce, giving at the end of a year a uniform reddened and roughened appearance to the face. Two and a half years ago his body became involved; reddish-brown spots appearing mostly on the back of body, few on the chest and abdomen. These spots coalesced and spread to the lower and upper extremities.

At the present time the macular lesions on the back are clearing in the centre, giving the circinate appearance shown in the illustration. The centres are anæsthetic, and the borders somewhat hyperæsthetic. This is a well-marked case of macular or anæsthetic leprosy.

The patient improved greatly while under careful hygienic and dietary treatment plus sepia 30 internally, and left the hospital only to come back last December, with gonorrhœa, for which he has been treated up to two months ago, at which time the former treatment was again instituted.

PHOTOTHERAPIE IN GYNECOLOGY.—Curatulo has reported some experimental studies and his results are in accord with those of Orlov. He has found that the main action of the violet rays consists in the relief of pain. Others have found the same to be true in pleuritis, arthritis, contusions, &c., and this effect has been explained by a molecular action upon the nerves. It has been found that their action induces a removal of the exudate about the uterus and the adnexa. This is thought to be brought about by increased vascularity inducing increased tissue changes. In endometritis the quantity and quality of the secretion is changed. In spasmodic dysmenorrhœa, not depending upon mechanical causes, the pains are diminished. In some of the author's cases, as also in those of Orlov's, some of the ill effects from this treatment consisted in general weakness and numbness of the lower extremities. The mode of action of the ultra violet rays upon disease processes may be understood when we remember their bactericidal action upon micro-organisms in the tissues, and their stimulating effect upon the tissues themselves.—*Monatsschr. f. Geb. u. Gyn.* Vol. XXII, 60.

COMMON VARIETIES OF LEG ULCERS.

BY

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THE importance of minor surgical conditions lies perhaps in their frequency and in their chronic course. That ulcers are common, all who have any dispensary experience realize; they probably come next to wounds and contusions in order of frequency. This is accounted for, as well as their relative infrequency in private practice, not by local causes, but on constitutional grounds, the result of depressing environment, diet, occupation, and disease.

An ulcer is an eroded surface with loss of substance, due to inflammation of a superficial structure. Billroth defines it as a loss of substance with no tendency to heal. Park says it is a surface which is or ought to be granulating, and maintains that the idea underlying it is infection and that the term should never be used for a process in which infection and consequent breaking down of tissue do not virtually comprise the whole process. This is the idea conveyed by defining an ulcer as a cross section of an abscess. It may affect the skin or mucous membrane; it is always superficial, with progressive enlargement by an inflammatory process.

There are three great classes of ulcers: *First*, simple; *second*, specific, *third*, malignant. The simple includes those produced by trauma, infection, vascular or lymphatic conditions, pressure, skin diseases, diabetes, etc. The second class embraces those ulcers caused by micro organisms; tubercular, syphilitic, diphtheritic, leprous, malarial and dysenteric. The third variety of ulcer is caused by carcinoma, sarcoma, and epithelioma. Any of these may be: 1, inflamed or *phagadenic*, with sloughing and spreading tendency; 2, chronic, callous or *indolent*, without or with a croupous base; 3 *erythistic*, a sensitive ulcer over the internal malleolus with intense pain and with fibrous skin changes; 4, *healthy*, with firm red granulations and bluish edges. The syphilitic ulcer may be (1) superficial, as though punched out with dirty, tawny base, (2) serpiginous, irregularly spreading from edges well healed over, (3) deep with crater-like edges, angry areola, and an inflamed base covered with green sloughs.

The most important point in the etiology is constitutional weakness, the result of complex causes. It is most frequent

in the poor, in males (three to one female), because the poor are more liable to trauma, exposure, and because filth and dirt lower vitality and act as carriers of infection. Alcoholism is a factor and a prominent cause as it prevents tissue-repair and because it causes atheroma and its various allied conditions, including cardiac and renal degenerations. For this reason ulcer is common in the average dispensary patient and most of these ulcers occur in hard drinkers, either drunkards or those who daily "soak" in alcohol with a diet of low nutritious quality. This results in impaired metabolism. A lack of variety and of the staples of diet results in the "lithæmic" state which predisposes. Obesity predisposes. With great drains upon their systems and with privations these anæmic patients have no healing power and hence their liability to ulcer (dyscrasic, cachectic ulcer).

Among constitutional causes diabetes is important. The blood and the tissues lack regenerative power and given an exciting cause the tissues of the leg are prone to break down. The saccharine blood is favorable to germs and hence liability to infection, especially as the skin of diabetics is in an irritated condition (Goodno). Furthermore, other causes are at work, such as arterio-sclerosis, faulty metabolism, and obesity. Tuberculosis as a factor should be considered by itself because its ulcer is less common and is the result of specific infection. And in a class by itself stands the malignant ulcer.

Other diseases which produce to ulcers are leprosy, glanders, diphtheria, and typhoid fever (intestinal ulceration), but these are not here considered. Perhaps the most important element in etiology is syphilis; it heads the list of all causes. Perhaps seventy to ninety per cent. of ulcers are truly specific. The initial chancre is an ulcerative process. The common ulcer is a lesion of the late secondary or usually of the tertiary stage. There is a circulatory cause in the atheroma and obliterative endarteritis of syphilis as well as in the development of subcutaneous gummata which are poorly nourished; with their breaking down we have the essential factors of ulceration. These patients are as a rule exposed to the most pernicious life-habits, and all other etiological factors have a marked influence upon them.

Among local causes infection comes first. This, Park says, with breaking down comprises the whole process of ulcer. It

varies in intensity, from the mildest type in old chronic leg ulcers to the virulent streptococcic infection accompanied with an acute inflammatory process; there is the mild indolent type of infection by bacillus pyocaneus. *Bacteria, however, are few, even in cases with foul discharge.* Infection may be strictly local as when dirt enters a skin abrasion and bacteria lodge there; or it may be general from a circulating poison in a weak subject. Local infection is common in cases of eczema or other skin conditions, where the skin is indurated, fissured, and inflamed; this is common in varicose veins. Local surface abscesses of trivial importance in themselves or sometimes contusions and abrasions which become infected are common causes. These are the result of trauma.

Trauma alone may cause an ulcer. As a rule there is infection. The result is molecular gangrene and an ulcer. This is apt to be the case when the nutrition of a part is poor, when it is exposed to injury, and where superficial structures are thin; hence the occurrence of leg ulcers on the extensor surface where these conditions are present. This accounts for ulcers produced by frost-bites as well as those caused by burns and for ulcers caused by the pressure of poorly-padded splints. In a few instances ulcers are the result of wounds in which healing occurs slowly or not at all.

Local vitality depends upon the condition of the local circulation. It is impaired in atheroma and in embolism. As a rule the venous circulation is principally affected in ulcer cases. This is primarily the case in varicose veins, although probably both varicose veins and varicose ulcers are the result of a constitutional cause; they depend frequently upon organic disease of the lungs, liver, or heart, or upon a mechanical obstruction above their site as results from repeated pregnancies or a pelvic tumor. Venous circulation is slow; there is passive hyperæmia with œdema. Commonly there is a chronic phlebitis; it is usual to find cellulitis and extensive periphlebitis. The leg shows pigment deposits and fibrous infiltration. This fibrous tissue results in lymphatic engorgement with more or less inflammation in the lymphatics. The tissues are therefore water-soaked and predisposed to small surface abscesses, especially as in these cases the skin is eczematous. Embolism acts in a similar manner by lowering nutrition and often by the emboli becoming the seat of infection. Thrombi

act in the same way. In rare cases there is a peculiar disturbance of innervation to a part producing the neuroparalytic ulcer, known as "mal perforant" (perforating ulcer of the foot, locomotor ataxia). Very often ulcers are caused merely by a local irritation of the skin, as in eczema, herpes, erythema, etc. And lastly we may have especially in syphilitic cases, a periostitis or osteitis present which offers a peculiarly favorable field for ulcer formation in the tissues over the affected area.

The pathology depends upon trauma and infection. In the event of the former there is molecular death or gangrene, as when a wound or contusion goes on to ulceration. In the case of the latter inflammation occurs. With it there is proliferation of the connective tissue of the skin. The cells soften as a result of the exudate; the blood cells and fibrin form a soft, boggy mass, which undergoes necrosis as a result of inflammatory pressure. The base of the ulcer consists of fibrin, blood cells, exudate, spheroidal and epithelioid cells formed by inflammatory proliferation. Below these elements are pus cells resting on a more or less homogeneous fibrous substance of fusiform cells. As healing occurs, granulation tissue forms with its numerous budding blood vessels resting on connective tissue which forms as cicatrization takes place. At the periphery of the ulcer the papillæ of the skin hypertrophy, resulting in the callous edges. If healing is good the granulations are pinkish, uniformly even and firm; if healing is poor they are soft, pale, and irregular, "exuberant granulations," with tendency to bleed. They are the result simply of overproduction of undeveloped capillaries. The base of the ulcer may vary from a granular, healthy red to a shiny, raw condition; it may consist of a dirty, spongy, offensive crust or of leathery black crusts. The discharge varies according to the amount of coagulation—necrosis; if granulations be sluggish and necrosis extensive we have the characteristic sloughing. True healing only occurs when new epithelium covers the ulcer; seen as a bluish film spreading from the edges. The ulcer may cicatrize with fibrous tissue. The white depressed scars following ulcers in syphilis are an example of this cicatrization. The syphilitic ulcer begins either as a simple round cell infiltration producing a pustular lesion or as a coagulation-necrosis of a deep gumma with secondary degeneration of the

overlying coverings of the gumma; this extensive process produces the deep crater-like ulcer.

Treatment resolves itself into: First, general measures; second, the indicated remedy; third, topical treatment. The object of local applications is: First, to combat inflammation and pain; second, to destroy infection and slough; third, to promote granulation and epithelial repair. The importance of drugs is very great as under their influence there is quicker response to local treatment and the result is more permanent. In syphilitic cases specific treatment with mercury or potassium iodide or both is followed by success where any other treatment is tedious and ineffective: this does not interfere with remedies.

Among general measures diet is important. It should be highly nutritious (bread, eggs, milk, etc.). The "lithæmic" diet is the most ideal. This includes an abundance of water which favors metabolism and raises the regenerative power of tissues. Alcohol should be prohibited except as it may be allowed in the form of milk punches or egg-nogs (if these are within the patient's reach, adapting diet to his needs and purse). In diabetes the diet should be, of course, arbitrarily restricted. The tonic food preparations such as beef and fat preparations are indicated in all ulcers. Fresh air is a much neglected element in all dispensary cases. Of equal importance is rest of the part to as great a degree as possible, cautioning against the dangers of trauma and of overuse of the legs.

Rest in bed is imperative if locally there is much inflammation. The leg should be elevated to an angle of about thirty degrees, especially in varicose veins. The most useful dressing is a liberal application on sterile gauze of creolin one part in twenty parts of glycerine, applied hot, covered with a large cotton dressing. The bandage in all ulcer dressings should run from the ankle to the knee, making firm even pressure, avoiding reverses over the skin. This dressing may be applied over shallow ulcers as well as over the surrounding inflamed area; if the ulcer is extensive it is best to pack it with a moist bichloride dressing. In some cases, especially if there is bone involvement calendula and glycerine—equal parts in six parts of water—gives better results. One of the best means for disinfection and sterilization of a chronic ulcer is oxidation with pure peroxide of hydrogen; this is to be fol-

lowed by free washing with bichloride solution (one in three thousand). If there are soft flabby granulations (unhealthy base) they should be removed with a sharp bone-curette under ethyl chloride; it may be necessary to use this procedure every other day for a while till necrotic tissue is thoroughly removed; and it may be done more thoroughly under general anæsthesia. The granulations may be destroyed with lunar caustic or preferably by pure carbolic. Douglas recommends the ferments, as proto-nuclein, applied as dressings. Cauterization demands care as the process of repair is unduly stimulated, leading to a weak scar. In syphilitic cases bromine water (amber colored solution) disinfects more thoroughly. Among moist dressings it is one of the best where there are black or green sloughs. Moist dressings are always indicated where there is decomposition with discharge, should be changed daily, and applied on narrow gauze-packing covered with the usual compress. A great many preparations are in use; of these Thiersch's solution, bichloride (one to three thousand) and calendula (one to eight) are probably the best. In cases with no active inflammation but with a dark congested area about the ulcer, creolin-glycerine works well over any indicated dressing in the ulcer cavity. In syphilitic cases iodoform absorbs the discharge, and is one of the most stimulating and cleansing agents we have; over it may be placed a moist calendula dressing, the two working admirably. Calendula alone is healing, soothing and is therefore the ideal application to relieve pain and sensitiveness with periostitis or phlebitis. It produces firm granulation and is an ideal dressing in almost all cases.

With firm granulations started the indications are to promote the growth of new epithelium. Balsam of Peru is the most useful dressing for this purpose; it is sometimes irritating to the healthy skin. Red Wash is inferior to it in ulcers for some reason, although often it works well; Balsam and Red Wash may be alternated. Cauterization with silver nitrate either in stick or in a solution (drachm to the ounce) is very efficient to stimulate epithelial growth when the granulations near the surface of the ulcer. The various ointments are ideal dressings at this stage of ulcer-treatments.

They should never be used when there is discharge; unless over a moist dressing and for their action on the surrounding

skin. Camphorated boric acid ointment is soothing and stimulating and is indicated especially by an irritable eczematous skin. Calendula ointment is inferior to it; its main indication is passive hyperæmia. Ichthyol ointment (25 per cent.) is one of the most useful dressings in multiple shallow ulcers. Ammoniated mercury ointment (5 per cent.) gives good results in superficial ulceration of the skin due to dermatitis.

In these cases the dry dusting powders may be used. Iodoform powder is useful to destroy sloughing and to stimulate granulations in syphilitic ulcers. Boracic acid and salicylic acid are out of date, although the former is useful in the form of calendulated boric acid dusted over the leg; aristol and various other preparations (orthoform, etc.) are recommended by the books (copper sulphate and antipyrin among the best), but they are of doubtful efficacy. Iodoformal (Warner & Co.) gives excellent results even in cases with deep excavation; it has a pronounced stimulating effect upon granulations.

When healing has advanced to the point where the ulcer is dry and on a level with the skin, strapping with zinc oxide adhesive may be employed. Strapping is somewhat irritating to the skin which in chronic ulcers is weak and thus predisposes to future breaking down. It has its main use in callos, atonic ulcers with thick adherent edges to cause absorption of the hypertrophied epidermis; this may be accomplished by a circular incision around the ulcer so as to free it from the adherent skin. Various other operative procedures are advocated, but are rarely necessary.

The new methods of treatment by radio and photo-therapy are being extensively tested and have of course their greatest field of usefulness in malignant and tubercular cases. It is probable that with few exceptions which are none the less noteworthy because few, strictly surgical treatment, even in these cases, is almost as effective.

In varicose ulcers nothing can be accomplished without the aid of measures favoring normal blood supply. Calcareo fluorica 3x is, when indicated, a very indispensable item of treatment in chronic varicose ulcers. The treatment is just as necessary after the ulcers are healed as before, because these cases are prone to relapse. A firm, even webbing or muslin bandage affords the requisite degree and kind of support much more effectively than the old fashioned elastic stocking: of

course, in aggravated cases only one of the radical operations will be effective.

The remedies given below are those most commonly indicated. They are not interfered with, in the lower potencies and even in the thirtieth potency, by local dressings. Indeed, the action of the homœopathic remedy is so different from that of crude medication, that it is hard to see how there can be any interference of one with the other. We have in mind one patient especially who, while under large doses of the protoiodide and vigorous local treatment was relieved of pain only when she was given lachesis 30 two doses daily; the pain returned when the remedy was stopped and disappeared when it was resumed; and she improved under its influence constitutionally.

REMEDIES.

Arsenicum Album (3x).—Phlegmasia alba dolens (Bell) with burning and stinging. Areola of ulcer red and shiny; base ashy, blackish, lardaceous. Ulcers extend rapidly, burn like fire, especially at night. Hard shiny swellings surmounted by ulcers. Ulcers are putrid and surrounded by red, shiny crown of raised fibrous granulations, accompanied with shooting pains when dressings are removed and thin, ichorous pus.

Asafetida (30th).—Fetid ulcers—left leg. High, hard edges, profuse, thin, green pus. The result of syphilitic affections or caries (Aurum), when ulcers so sensitive that no dressing is tolerated.

Asterias rubens (Tinct.).—Small itching vesicular eruptions which tear easily and change to large burning shallow ulcers with sensitive edges and fetid discharge.

Bromine (6th).—Carrion-like odor; green, putrid discharge; burning pains, worse cold water and exposure to air. In syphilitic and neglected cases.

Calcarea carbonica (3x—30th).—Varicose ulcers on dry, rough skin, with lymphatic involvement. Wrenching, shooting pains in deep, excavated ulcers with scanty pus.

Calcarea fluorica (3x).—Interstitial hardening with fibrous deposits in varicose veins (Aurum mur et met—is said to exercise a solvent action on these deposits). Chronic syphilitic cases. *Varicose ulcers*, tearing pains in veins; dirty, red ulcers, with burning and offensive discharge; unhealthy base and granulations. Varicose veins of pregnancy.

Carbo veg. (30th, 200th).—Decay and decomposition. Bluish, (Lach) livid, purple ulcers, accompanied with foul pus and lymphatic stoppage. In ulcers the result of old wounds with burning, bloody pus, foul discharge due to breaking down of varicose veins, with phlebitis and cellulitis.

Chlorine.—Fetid, stinging ulcers with yellowish borders.

Crotalus (12).—Gangrenous, blackish ulcers with profound disorganization (Echinacea); with bone involvement and severe pain; skin dry and leathery; hemorrhagic tendency; relief from rest.

Fluoric acid (6).—In silica cases Sil. relieved by warmth. General relief from cold. Necrosis of long bones. Weakly, old patients with varicose veins.

Graphites (30).—Stinging, itching, varicose ulcers with characteristic pus, abundant proud flesh; the ulcer is superficial and tends to spread over and join other ulcers.

Iodine (Tinct. and 12th).—In ulcers with pseudo elephantiasis. Swelling of leg with deep ulcers on tibia; for its power to remove exudates and limit hyperplasia.

Kali Bich. (1x—30th).—Dry, regular, punched-out ulcer with a blackish spot in centre; bright red with inflamed areola, with tendency to extend in depth, leaving deep cicatrix, with thick, yellow crusts.

Lachesis (12th and 30th).—Flat, superficial ulcers with dirty, foul base, surrounded by smaller, excoriated, red and sensitive areas with tearing, burning pains. Spongy, dark red ulcers with pale, flabby granulations, with smarting when dressings are removed.

Nitric acid (6).—Phagedenic ulcers with corrosive discharge (Mur. Ac.).

“1, Ragged, zig-zag, raised edges; 2, proud flesh, profuse granulations; 3, vascular—bleeding on touch; 4, splintery pains.”—(Dewey—Therapeutics).

Secale (Tinct., 6th).—Livid, lead-colored ulcers with supuration in old people, from varicose veins, with cold, dry skin.

Silica (3x and 30th).—Offensive ulcer with watery, acrid discharge, relieved by warmth (fluoric acid aggravated); accompanied with pain in carious bone and with local inflammation. (Thuja is useful in fungous ulcers).

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MYOMECTOMY.—Manton (Detroit) deprecates the tendency to abandon myomectomy in favor of the removal of the uterus. The trend of surgery is ever toward conservatism, and unnecessary and unwarrantable procedures should evoke the strongest condemnation from every one who has the good of his craft at heart. Notably Martin has shown that myomectomy possesses advantages over hysterectomy in conserving the uterus, putting the tissues in the way of renewed health, restoring functional activity to the organ and rendering subsequent pregnancy possible. Enlarged experience has proved that myomectomy under proper restrictions, has accomplished all that is effected by hysterectomy, but without the loss of organ or function or the precipitation of those nervous and mental phenomena which not infrequently render life a living death. In closing the article the author also says: Under modern methods, in skilful hands, the dangers from this operation—hemorrhage and sepsis—so greatly feared by the older operators, have been practically removed, and in suitable cases almost any number of tumors wherever situated may be enucleated with satisfactory results.

In determining on myomectomy as the operation of choice, the age and physical condition of the patient, the arrangement and distribution of the tumors, and the amount of uterine musculature present must be given chief consideration.—*Amer. Jr. Obs.* Vol. 53, 73.

CLUB FOOT AND ITS MANAGEMENT.**BY**

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(Read before the Germantown Medical Society.)

THE deformity in club foot is a progressive one, due to the tendency of bone to adapt itself to altered pressure. The principle of the distorting force is well shown in the results of Wullstein's experiment upon the growing dog, which after being bandaged in an abnormal position for a number of months, developed a true lateral curvature of the spine with structural changes. In the walking patient the distortion is still further increased by the superimposed weight of the body upon a foot in which the normal power of resistance is lessened and perverted. The weight which should properly fall through the center of the ankle and be distributed to the foot, falls to the outside. The changes found in the deformity are not only functional but structural and occur with a definiteness that is well summed up in a law given by Wolff from his studies in bone alterations, which in substance is as follows: Every change in the formation or function of the bones, or of their function alone, is followed by certain changes in their internal architecture and external conformation in accordance with mathematical laws.

True club foot in varying degree is a combination of the varus and equinus positions; the foot is shortened, and inverted, the inner side of the sole elevated and curved on itself and the heel is drawn up by the thickened and contracted tendo Achillis. The varus consists in a twist at the medio tarsal articulation. The scaphoid instead of articulating with the head of the astragalus is found on its side and in severe cases in contact with the internal malleolus. The cuboid is displaced inwardly as are the cuneiform and metatarsal bones. The astragalus is pushed forward so that part of its superior articulating surface is uncovered by the tibia and projects upon the dorsum of the foot.

The equinus position is maintained by the os calcis being drawn upon in a vertical direction.

Structural changes take place in these bones, such as thickening, thinning and twisting, and the formation of new articular facets. The ligaments and fasciæ are altered by compensatory shortening or length-

ening as are the tendons which are found more to the inside than normal, and large callosities and bursæ form on the outer side and dorsum of the foot from the pressure of walking.

The cause of the congenital variety is generally believed at this time to be due to intra-uterine malposition and pressure, rather than from a retarded rotation of the foot. A radiograph of the foot of a new-born baby shows by the position of the astragalus and softness of the structures how easily such a result could occur. The paralytic form is less often found, as the valgus deformity occurs more frequently from this cause. It might not be uninteresting to know that at first all congenital deformities were thought to be due to paralysis, and until quite recently muscular contraction of certain sets of muscle was ascribed as the primary factor. The cause of an acquired form recently observed was simple traumatism, affecting a boy sixteen years old. The deformity of three years' standing had progressed to such a severe degree that an excision of one of the tarsal bones was found necessary.

Probably there is no condition where the principles of treatment are so well laid down, and theoretically the results should be unvaryingly good, yet there are a great many relapsed and half cured cases, due, I believe, to neglected after care. The history of the treatment dates back to Hippocrates, who in his work "*De Articulis*" describes the deformity and states that it could be corrected by reposition and bandaging; but it was not until the simplicity and value of the division of tendons was shown by Stromeyer, to whom is due the honor of establishing as an operative principle the subcutaneous tenotomy; and the successful application of apparatus by Scarpa, that the treatment began to take the practical form to which it has been brought by modern surgeons.

In the congenital variety the time for simple manipulative treatment is relatively short and should be begun as early as possible, while the foot is in a plastic state, and when employed must be carried on persistently, as intermittent interference only tends to toughen the deformity and change a simple case into an intractable one. The method consists in having the mother or nurse hold the ankle, and, grasping the foot in front reduce and retain it in this corrected position for several minutes, afterwards rubbing the leg from the thigh down. This should be done three or four times a day for a

number of months. After the foot has been rectified some form of retention apparatus should be applied. For more resistant cases a series of corrective plaster casts is a successful method, in applying these the leg should be slightly flexed; the foot held firmly by an assistant while the operator after fixing the plaster bandage above the ankle rolls it toward the deformity and passes around the sole to the outside of the leg and over the knee, using the knee as a fulcrum to make traction upon the foot, which should tend toward a slightly over-corrected position. This procedure also serves to prevent the cast from slipping, a thing so apt to occur in fat babies. In certain selected cases instead of the cast a light brace may be employed. This is applied to the foot in such a manner that



FIG. 1.

TALIPES EQUINUS VARUS, SHORT-
ENED TENDO ACHILLIS AND
FLEXOR LONGUS HALLICUS.



FIG. 2.

NEGLECTED CASE OF CONGENITAL
CLUB FOOT.

as the upright is brought to the side of the leg it acts as a lever and tends to correct the deformity. In older cases with more severe distortion it is usually necessary to supplement manipulation with division of certain tendons, fasciæ and ligaments.

It is a matter of much individual judgment to determine the requisite amount of operative work. As the tibial group, the tendo Achillis and the long flexor of the great toe are the tendons most involved, it is necessary to divide one or more of these, either openly or subcutaneously. My preference is to do a subcutaneous tenotomy of the tibials and tendo Achillis, and, on account of the contracted skin and plantar fascia make an open section at the inner side of the foot dividing the nec-

essary tendons and constricted bands. As it is necessary to use force even after division it is well to divide the tendons and fascia of the foot first and leave the tendo Achillis intact to act as a point of resistance, correcting the equinus position last. While this is the rule yet recently I had success with just the reverse and think the method especially applicable to mild cases. At the operation the tendo Achillis was first divided and the os calcis reduced to its horizontal position, then the astragalus was pushed into the mortis between the internal and external malleoli by pressure upon its head while the other hand steadied and pulled forward the heel, after which the positions of the other bones involved were corrected by traction upward and outward. In modelling the foot either after division of tendons and fasciæ or without, no power is so good as the intelligent hand, and if necessary several pair may be employed. The use of a well-padded block is of service and in certain resistant cases a club foot wrench must be employed. In the final manipulation the foot is to be carried to an over-corrected position and held while a cast is applied. Should it be impossible to fully correct at one sitting, a series of casts may be applied at intervals of ten days to two weeks, correcting a little more each time, care being used to prevent the foot from sagging and stretching the weakened structures at each removal of the cast. A light retention brace must be worn after the plaster of Paris is discarded. It should interfere as little as possible with motion at the ankle joint and hold the foot in slight over-correction. The brace consists of a sole plate and either single upright or double. The one now in use in the orthopedic clinic at the Hahnemann Hospital has two uprights with a pad opposite the external malleolus for a fulcrum and a high inner lip on the sole plate to make pressure. The tendency to relapse to the equinus position can be prevented by limiting the motion at the ankle joint by means of a stop pin, or by attaching bands of elastic webbing to the fore part of the sole plate and the uprights. In cases where there is laxity or actual rotation at the knee joint the brace is fastened above the knee. In the paralytic variety, from anterior poliomyelitis, the tendons on the inner side of the foot are particularly shortened and resistant from their unopposed action, and usually require division before the foot can be over-corrected. The brace must be worn indefinitely in

this form unless the case is a suitable one for a later tendon transplantation. The tendons of the foot are especially adapted to this work, but it should not be attempted until the foot is fully rectified. In certain inveterate cases in patients over twelve years of age it is necessary to resort to more severe operative work, either an osteoplastic section or excision of one or more bones of the tarsus supplemented by the appropriate division of soft structures.

A number of operations have been worked out and followed by various surgeons, such as osteotomy of the os calcis and wedge shape sections of the tarsal bones. I desire to especially speak of the good results following operations on the



FIG. 3.
CORRECTION OF FOOT AFTER TEN-
TOMY OF THE TENDO ACHILLIS
AND OPEN SECTION ON
INNER SIDE OF FOOT.



FIG. 4.
RESULT FOLLOWING ASTRAGALFC-
TOMY AND DIVISION OF STRUC-
TURES ON THE CONCAVE
SIDE.

astragalus. In three cases recently operated, the astragalus was removed in two and in the third a wedge-shaped section of the astragalus with its base toward the outside of the foot was made. The two astragalectomies were in patients over sixteen years of age who had severe types of the deformity. The results can be seen by the accompanying photo; the ankle joint has a good rocking motion the os calcis having slipped up between the two malleoli, and extension and flexion is good. The case of cuneiform section was in a child aged eleven years, who had infantile paralysis affecting the perinei group, and, while he had had several operations to correct the deformity, it had always recurred, due, no doubt, to the after care he had received in regard to his brace. It was found nec-

essary to make an open section of the soft structure on the inner side of the foot, after which the foot was over-corrected and put in plaster. The results of the operation were: a straight foot, good function at the ankle joint and practically no shortening of the leg. Although in astragalectomy there is some slight shortening of the leg yet even in unilateral cases it is hardly noticeable and I believe it is one of the simplest and best of the operations upon the tarsus. After this operation a stout club foot boot should be worn for several months. The after care of these patients consists in frequent inspection of the retention apparatus; massage of the leg and foot daily, and the use of the support until the foot can be placed normally upon the ground without the tendency to relapse.

I might say that whatever method is followed, the prognosis depends very much upon careful after treatment, often times only made possible by the hearty co-operation of the caretakers of the child or the requisite amount of intelligence in the adolescent and adult.

ARNICA.—(N. Y. Homœopathic Materia Medica Society). The bruised sensations produced in the provings of arnica give the keynote to its use in trauma. This condition is one of its most valuable indications, and is true both for the immediate and remote effects.

In the discussion, many physicians reported its routine use for the bruised condition of the soft parts after child birth. It is a valuable drug for children who have bumped their heads. They should be put to bed and given arnica. This will save much trouble afterward.

One physician mentioned having used it in cases of scirrhus where he had obtained a history of trauma, and thought good results had followed. It was mentioned as useful in removing soreness of the teeth after they had been filled. Also in purpura when the spots appear black and blue. It was spoken of as a valuable remedy for sordes, and foul breath after operation; especially if sepsis were present. Acetic acid was given as a comparison. In twitching of the muscles after injury to the head, cicuta is a better remedy than arnica.

The following summary includes the most prominent points about arnica brought out in the discussion: The result of trauma, especially about the head; pains as though bruised; purpura; boils; sepsis, abdominal distension; diarrhetic stools of foul odor; eructations like rotten eggs; intermittent fever, the bruised sensation lasting through the whole paroxysm; bitter vomiting at the end of the fever; hungry during the sweat; fear of being touched or even of being approached.—Guy B. Stearns, Secretary, *N. A. Journal of H.*

DYSPEPSIA.**BY**

THOMAS B. BRADLEY, M. D., PHILADELPHIA, PA.

(Read before Germantown Medical Society, April 16, 1906.)

FIFTY or sixty years ago, many writers on diseases of the stomach classified almost all chronic gastric diseases except cancer as dyspepsia.

Some of these writers gave three different forms of dyspepsia, with no less than nine sub-divisions; thus Copeland describes under dyspepsia a typical picture of gastric ulcer.

At the present day the term dyspepsia is not often used by writers on diseases of the stomach. The disease understood as dyspepsia is chronic-gastritis or chronic-gastric catarrh.

Osler, in the heading of his chapter, uses the three terms, "Chronic-Gastritis, Chronic-gastric Catarrh, Dyspepsia." Goodno, in his work, gives Chronic Gastritis, Chronic Glandular Gastritis and Chronic Dyspepsia.

Riegel, in his work on diseases of the stomach, says of dyspepsia, "I use the term dyspepsia although I am aware of the fact that its meaning is rather indefinite. I do not use it to signify deficient, or reduced digestive powers, but to indicate that the digestion in general is disturbed and abnormal."

Chronic-gastritis is usually caused by too rapid eating, a lack of or a bad condition of the teeth, resulting in imperfect mastication, the abuse of alcohol, and chewing tobacco. Einhorn states, "ice water and fast eating are the two principal causes of the so-called American dyspepsia." All these tending to irritate the stomach and to cause a catarrhal condition. There are also certain conditions which may bring about a secondary gastritis by affecting alterations in the composition and structure of the blood, among these are chlorosis, anemia, scrofula, the secondary anemias following typhoid and typhus fevers, pregnancy, tuberculosis, diabetes, gout, nephritis, and heart-disease. Also diseases of the liver and in affections of the portal vein by interfering with the circulation of the stomach. Hemmeter says: "Most persons treat their stomachs badly, and neither eat with proper mastication nor are able to resist culinary temptations, therefore chronic-gastritis is one of the best nourished and most prevalent diseases in the world." This disease is found more frequently in men than in women.

The symptoms develop very gradually and are *not* well

marked. After the condition has lasted for a longer period of time and after some manifest indiscretion of diet the patient may complain of a salty taste in the mouth, feeling of fullness and swelling in the epigastrium, thirst, diminished appetite, dizziness, belching, slight pain over the gastric region, nausea, regurgitation, and perhaps vomiting.

The diagnosis of this disease, however, cannot be made from these symptoms because we find the same symptoms in gastric ulcer, gastric cancer, dilatation of the stomach and in the gastric neuroses. It has been said that we can only make a diagnosis by exclusion; if we can eliminate gastric ulcer, cancer, dilatation and the neuroses what is left is chronic gastritis.

In gastric ulcer we have the vomiting of large quantities of blood, pain appearing shortly after meals, lasting two or three hours, influenced by the character of the meal; the larger the meal and more coarse the food the more intense the pain. Small, light meals causing very little pain. The epigastric spot painful to pressure is to the left and slightly below the xyphoid, the dorsal pain point to the left of the ninth dorsal vertebra. There is an increase of the free hydrochloric acid.

In gastric cancer we find an absence of free hydrochloric acid, the presence of lactic acid in the stomach contents, cachexia, frequent vomiting of large quantities of chyme, the presence of tumor, the symptoms permanent and not having lasted from more than six months to a year.

Nervous gastralgia simulates chronic-gastritis so closely that the only way we can detect the difference is by repeated examinations of the gastric contents. Sooner or later we find great variations in the amount of free hydrochloric acid, and many nervous symptoms.

In all cases of stomach diseases excepting in cases where ulcer can be reasonably suspected a test meal should be given. Usually Ewald's test breakfast is employed, which consists of a roll and cup of tea, or two slices of bread and sixteen ounces of water. This is allowed to remain in the stomach one hour and then removed, the stomach tube being used. The expression method is the best way to obtain stomach contents. Patients are told to press down as if they were trying to have an evacuation of the bowel. After securing the test meal it is usually filtered (but can be examined without filtering) and then examined for its total acidity, free hydrochloric acid, rennin,

pro-peptone, peptone, starch digestion, and pepsin, lactic acid. Also notice whether it contains mucus or not. The vomited matter can be examined if patient vomits.

In chronic gastritis we find a diminished amount of hydrochloric acid or an absence of it. The normal amount is from 20 to 40. These numbers represent the number of C.C. of decinormal solution of sodium hydroxide required to neutralize 100 C.C. of gastric contents. The percentage can be obtained by multiplying by .00365. Ewald divides this disease into three forms, simple, mucous and atrophic gastritis, these are, however, only a difference in degree, one form going on to the other after a lapse of years. In the first form the fasting stomach contains only a small quantity of a slimy fluid. After a test breakfast we find free hydrochloric acid decreased or absent, combined hydrochloric acid present, pepsin and rennen always present. The second form is the same as the first only there is always present a large quantity of mucous. In the third form the fasting stomach is empty. The test meal shows no free or combined hydrochloric acid, no rennen or pepsin. In this condition rennen zymogen should be tested for; if present the patient has some chance of improvement. Boas, Riegel, and several other German writers also recognize another form of chronic-gastritis which they call sour catarrh or chronic gastric catarrh acid. In this the test meal gives a normal or increased amount of free hydrochloric acid, mucous being present. Bordman Reed, of this city, Hemmeter, of Baltimore, and Stockton, of New York, concur in this view. Through my observation of a large number of these cases, making repeated examinations of test meals obtained from them, noting the great variations of the free hydrochloric acid and other nervous phenomena, I am inclined to accept the statements of Ewald and Einhorn that these cases should be classed under the gastric neuroses.

There is great difficulty sometimes in differentiating between gastric cancer and atrophic gastritis. But in cancer Ewald calls attention to the fact that the color of the stomach contents is always bloody. The motor function in chronic gastritis is normal or only slightly diminished. The prognosis of a genuine chronic gastritis is not bad. Rational treatment as a rule succeeds in curing or improving the patient. The less secretion there is in the stomach the more serious the trouble.

Sir Henry Thompson, in his very interesting little work on "Diet in Relation to Age and Activity," states that nine out of ten cases of dyspepsia are no disease at all, but only a condition resulting from errors in diet, not so much from the quality, as the quantity, and can be very often quickly remedied by regulation of the diet. This of course applies to cases that are seen very early. The treatment of chronic-gastritis may be summed up under five heads, diet, hygienic-regimen, lavage, electricity, and medicines. The regulation of the diet is most important. It is better in severe cases to give five meals daily in a liquid or sem-liquid form, barley, oat meal, or rice soups, chicken soup with an egg in it, soft boiled eggs, scraped meats raw or broiled, butter, tea, or cocoa. The quantity should not be too large and as Von Noorden says repeatedly: "*Dyspeptics do not eat enough*," care should be taken that the quantity is not too small. After about one week on this diet, the patient should be placed as nearly as possible on ordinary table diet. Personally at this time I advise patients to take food containing about two-thirds starch, the other third made up of albumin. I do not give them a diet list, but simply forbid pastries, meat with tough fibre, pork, sausages, lobster, salads, cucumber, pickles, cabbage, and strong alcoholic drinks. It is necessary to impress upon these patients to eat slowly and to masticate the food thoroughly and if the teeth are in bad condition have them attended to.

Cold sponge baths in the morning followed by a thorough rubbing of the skin and any exercise that does not over-exert them, walking, bicycle riding, horseback riding, and light gymnastic exercises.

Washing out the stomach in most cases is valuable, particularly in the mucous form, and it is best to do this in the morning with the stomach in a fasting condition. The water should be at a temperature of 100 to 110 F. Common table salt may be added, about 10 grams to a litre, or boric acid 1 dram to a litre. Fliniers recommends a mixture of common table salt two parts, soda one part, one gram of the mixture to two or three litres of water. If fermentation is very marked some anti-fermentative remedy may be added to the water. Stockton recommends very highly salicylic acid 1 to 1000, resorsin two to five parts to 1000. Resorsin I think the better and frequently employ it. Lavage had better be employed

every other day for a period of two or three weeks then once or twice a week for a couple of months.

Electricity is very beneficial in these cases, the faradic current being used. It may be employed percutaneously or intra-gastrically. In the percutaneous method a large sponge electrode is put over the upper abdomen covering the gastric region, while the other electrode about one-third smaller is held to the left of the seventh dorsal vertebra. I prefer intra-gastric electricity, it being more effectual as the current reaches the inside of the stomach in its full strength. There are several so-called deglutable electrodes; Ewald's, Einhorn's, Stocton's and Reed's. The method of introducing the electrode is to have the patient open the mouth wide, place the left forefinger at the base of the tongue and press lightly outward, then with the right hand introduce the electrode as far down as possible. The patient drinks about one-half pint of water and in a few moments the electrode enters the stomach. This can be determined by placing a mark about 16 inches from the electrode, the distance from the cardia to the teeth being that length.

A sitting lasts ten minutes. The abdomen is bared, and a large plate electrode is held over the gastric and epigastric region five minutes. This is then disconnected and a sponge electrode connected with the cord which is rubbed up and down from left to right over the gastric region for two minutes. Then from right to left to the back and allowed to remain at the left side of the seventh dorsal vertebra for one minute, then return to the front, moving the electrode gently up and down over the gastric region for two minutes gradually reducing the current. The strength of the current had best be determined by the patient, but it should at least be strong enough to cause distinct contractions of the abdominal wall. There has been some objection raised to intra-gastric electricity on account of the supposed difficulty in the removal of the electrode, but if removed as directed by Einhorn no difficulty is met with. On withdrawing the electrode an obstruction is usually felt, at this point if you tell the patient to swallow, the act of swallowing pushes the larynx upwards and forward and the electrode comes out easily. In very nervous patients I find it is better to allow them to remove the electrode themselves simply instructing them when the obstruction is met with to pull it out during the act of swallowing.

Chief among the medicines that are usually prescribed for this condition in all schools is dilute hydrochloric acid. This is given any where from 6 to 12 drops in a glass full of water, three times a day, one-half hour after meals, up to one dram three times a day, given 20 drops before each meal, 20 drops during the meal, 20 drops after the meal, well diluted. The acid is best taken through a glass tube and where the larger doses are employed it is well to instruct the patient to rinse out the mouth with a solution of bi-carbonate of soda to protect the teeth.

Nux vomica is also used in both schools either in the form of tincture or as the sulphate of strychnia; in our school where strychnia is used the dose is a one grain tablet of the 2x four times daily.

Creosote is also used by both schools, either in the crude form or in potency. To increase the appetite the old school use fluid extract of *condurango* in doses of 20 drops to a teaspoonful three times a day. *Quassia* and other bitter tonics are also sometimes used.

In our school the chief remedies to be studied are arsenic, *hydrastis*, *argentum nitricum*, *lycopodium*, *bismuth sub-nitrate* and *sub-gallate*, *bryonia* and *graphites*. *Pepsin*, *papoid*, and other digestive ferments, also many pre-digested foods that were so largely used some years ago have been abandoned in the treatment of chronic gastritis as they tend to weaken an already impaired digestion. To correct the constipation attending these cases, cooked fruits can be given, particularly prunes, pears and baked apples. The best method, however, to correct constipation is to instruct the patient to go to the toilet every day at a certain hour and remain a few minutes; sooner or later this will have a tendency to regulate the bowels.

HÆMATOMA VULVÆ.

BY

EDWIN H. VAN DEUSEN, M. D., PHILADELPHIA, PA.

EARLY one morning a friend asked me by phone to come to a Polish settlement to see a case of ruptured bladder.

The woman was in great pain. A round, glistening, fluctuating mass the size of a child's head protruded at the vulvar opening. She had been delivered three hours before of a good-sized baby, but without accident or unusual suffering. The mass had developed since that time. It was soon learned that the mass sprang from the right side of the vulva and did not extend up the vaginal wall. The catheter drew considerable urine perfectly clear and free from any tinge of blood. A thorough examination was difficult on account of the surroundings.

The patient and her friends refused to consider any proposition looking to her removal to a hospital. The rapidity of the development and the excessive pain were considered indications for radical treatment. After careful antiseptic preparation a free incision was made at the most prominent part of the tumor and the cavity was thoroughly emptied of a large blood clot and washed with formalin solution and packed with iodoform gauze.

As soon as the swelling had subsided the wound was invisible and was found to be actually in the vagina. The distention from the increasing hemorrhage had everted the labia majora and dragged the vaginal wall downward so that it constituted the presenting part, and the skin surface of the labia majora was rotated outward and buried in the fold between the tumor and the thigh. Except for a slight and transient temperature rise, the case progressed to a good and uneventful recovery.

Hæmatoma of the vulva or vagina is a rare condition, occurring not more than once in two thousand cases and probably much less frequently. It seldom occurs before labor and only occasionally several days subsequently, in the latter case resulting from sloughing of a vessel subjected to prolonged pressure. Most of the cases are discovered shortly after labor and probably result from rupture, from pressure during delivery, of a loop of vessel containing imprisoned blood. The

location of a hæmatoma varies with the location of the ruptured vessel. If the vessel is above the pelvic fascia the tumefaction is to be found in the vagina and may extend upward to the false pelvis. If pain or discomfort does not follow, and it may not if the hæmorrhage extends upward between the folds of the broad ligament, the condition may not be discovered until either anæmia or symptoms of inflammation or infection supervene.

It is very probable that deaths occurring within twelve hours after labor with no pronounced symptom other than a gradual but rather rapid failure of the heart's action, are due to the rupture during labor of a vessel above the pelvic fascia.

If the ruptured vessel is in a vestibular bulb the tumor develops in the corresponding labium and varies in size with the size of the vessel and the length of time the hæmorrhage continues. If the hæmorrhage is slight, interference is not only unnecessary but unwise.

If the hæmorrhage is so great as to occasion an alarming anæmia, a threatened penetration to the surface or subsequent sloughing from pressure, radical treatment becomes necessary. The tumor should be opened under thorough antiseptic precautions. The incision should be made upon the skin surface of the labium or as near the skin surface as possible and should extend to the depth of the cavity posteriorly. The cavity should then be thoroughly emptied and washed with an antiseptic solution and packed with antiseptic gauze. The subsequent history of the case will depend upon the severity of the consequent infection. Not infrequently a fatal termination ensues.

THE ACTION OF TEA AS A BEVERAGE.—The January issue of the *Practitioner* contains an excellent discussion by Brunton on the effects of drinking tea. His conclusions may be stated as follows: Tea, when properly prepared, and taken in moderation, is both useful and agreeable. When taken in too great quantity, or along with butcher's meat, when too strong, when infused too long, or still more when boiled and stewed, it is apt to produce digestive troubles. When taken to excess it may produce nervous symptoms of the most serious character, and facilitate, if it does not actually produce, mental degeneration.

INFANTILE ECZEMA.

BY

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(Read before the Pathological Society of Pittsburg.)

ECZEMA is the most frequent of the cutaneous affections of childhood. It affects all classes, it occurs at all seasons, and affects in about equal proportion bottle babies and those fed at the breast. Its etiology is by no means thoroughly understood, some authorities giving great weight to diathetic causes while others believe that most, if not all cases can be traced to the influence of external irritants. That both factors are causative is probable: as in the history of the majority of cases, both a predisposing and an exciting cause can be demonstrated. That there is a predisposing diathesis is the only theory that harmonizes with its clinical history. That this diathesis is hereditary can frequently be shown in the family history of the patient. What this condition of the general system, which awaits an exciting cause to produce an outbreak of the cutaneous inflammation, is, no one positively knows; but it seems probable that it is akin to that of gout or rheumatism. Any condition which impairs the general nutrition and reduces the individual power of resistance may engender in the skin a vulnerability to slight external irritation. This condition may be due to some inherent pathological state such as scrofulosis, achitis, malnutrition, anæmia, indigestion or impairment of the excretory functions: and may be caused by unhygienic surroundings, especially lack of proper ventilation of the sleeping apartments, improper feeding, generally too frequent, or the mother's milk may be scanty or altered in quality from menstruation or pregnancy or ill health. Very frequently chronic constipation in the mother of the nursling seems to favor an outbreak. Although teething often seems to act causatively, the fact that outbreaks and relapses are of frequent occurrence just before a tooth penetrates the gum, is probably due to the local irritation acting reflexly upon the skin. While the majority of infants affected with eczema appear to be in perfect health, careful investigation will nearly always reveal some internal abnormal condition favoring its development.

Professor Joseph C. White, of Boston, in a paper published some years ago, thus graphically draws attention to the external factors in the etiology of eczema which come into play the moment an infant is born into the world: "From its prolonged, placid, sub-aqueous life it emerges into sudden contact with the more stimulating properties of an entirely different element, the atmospheric ether. For the first time its capillaries dilate to their full extent, under the new conditions of respiration, an independent and intensified circulation, and spasmodic vocalization. So, too, its glandular systems are called upon to adapt themselves to the strange external surroundings, the sebaceous follicles to modify the character of their secretions, the sweat glands to perform their functions, probably for the first time. Moreover, at this critical period the infant makes an abrupt acquaintance with the foreign material of the outer world. Anointed at once with fats, too often a rancid oil, then rubbed with a chemical compound, more frequently than otherwise compounded of impure constituents, and so imperfectly combined that an excess of alkali is at liberty to exercise its caustic action upon the susceptible skin, then plunged into water of varying temperature and briskly rubbed; and finally received upon a coarse blanket and dried with friction by a coarse towel, such is often the treatment the skin receives. Later the dressing around its abdomen is bound tightly with a broad flannel band, between its legs are stuffed thick folds of napkin, and about its lower extremities again the rough contact of the woolen petticoat. All ingeniously adapted to irritate the skin by over heating and rude friction. It is not surprising, under these circumstances, that the skin should resent such irritative surroundings and should, within a few days, develop a fugitive congestion of greater or less extent, or a mild follicular inflammation which may develop into the more serious and permanent form of eczema."

Imperfect removal of the *vernix caseosa* at the first washing may predispose to an outbreak. Another frequent cause is the failure to remove the discharges promptly. The irritating fecal matter and urine kept in contact with the skin can scarcely fail to produce an erythematous condition, which, unless soon remedied by the removal of the cause may induce an eczema. However, many cases are met where all causes acting directly upon the skin, from without, can be eliminated and we are

forced to the conclusion that the disease may develop from internal causes alone.

The eruption generally presents characteristics not usually observed in the adult, owing to the soft and delicate structure of the skin in children. It generally appears about the head and face first, the other portions of the body being prone to become affected later. It is more inflammatory than in the adult and although nearly all the elementary forms may be observed in children, the most frequently occurring are the erythematous, vesicular and pustular types, which often merge into each other. The leathery-like thickening of the skin as seen in adults is rare. Other features connected with infantile eczema are cutaneous abscesses, glandular swellings and furuncles.

In the treatment of this disease the first indication is to remove the cause, if discoverable. After the most careful inquiry in regard to any possible external irritation, and the correction of the same, the remedying of improper habits in feeding, the regulation of the quantity and quality of the food, and attending to the proper ventilation of the sleeping apartments, and the righting of any other unhygienic conditions which may surround the patient, the question of treatment, both external and internal, must be considered.

There has been much discussion in regard to the danger of "driving in" an eczematous eruption upon internal organs, by means of external applications, not only among homœopathic physicians, but by those of the dominant school who have given the subject special investigation. This idea probably arose partly from the theoretical view of the sympathy of organs, partly from the well-known fact that cutaneous inflammation diminishes or disappears during acute febrile affections, to return again after the cessation of such attacks. And no doubt, some cases of inflammation of internal organs have resulted from the violent repressive applications, advised and used in the past. It is our duty to treat and cure, if possible, every case entrusted to our care quickly, safely and pleasantly; and I believe that this result is best accomplished by the employment of all the means at our disposal in the treatment of this disease. Local applications primarily protect the inflamed and excoriated surface from irritation due to exposure to the air, water, dust, or friction. Secondarily, they serve as ve-

hicles for the application of such medicaments as may be indicated. As eczema is an itching disease *par excellence*, and so long as there is itching there will be scratching, and so long as there is scratching there will be no opportunity for the excoriated skin to heal, means must be used to prevent the scratching by the employment of such agents as will allay the intense pruritus. And when the disease is due to or prolonged by infection, we can greatly shorten and modify its course by the use of such applications as will destroy the organisms to which such infection is due. These means can be employed without interfering with the action of curative internal treatment, and give quicker relief to the patient and prompt cure of the disease than internal treatment alone.

The first indication in the local treatment is the removal of all scabs and crusts by the application of a bland oil or starch poultice. In the treatment of eczema capitis, this is especially necessary: and the use of the comb and brush as the means of removing the scabs should be prohibited; the hair being cut close to the scalp before any local treatment is instituted. After the crusts are softened and gently removed, the raw, oozing surface is ready for treatment. In this form a mild, soothing ointment base, combined with an anti-pruritic will prove most generally useful in preventing a reaccumulation of the crusts, and allaying the itching and consequent friction and irritation. At the outset of a vesicular eczema dusting powders may be used with advantage. Many substances have been used for this purpose but the most useful have been found to be the compound stearate of zinc which is a non-irritating, slightly astringent powder and leaves upon the skin a coating impervious to moisture. With it can be combined any remedy indicated by the local condition. In moist eczemas, lotions are of great value. The simplest is a saturated solution of boracic acid which, frequently applied, will often act admirably. Or lotions containing insoluble powders in suspension, which after drying leave a powdery precipitate on the skin, of which the calamine lotion is a type, will in many cases prove most efficacious. While in the great majority of cases dusting powders and lotions act well, in a certain number, soothing ointments will suit better, especially in protecting the raw, oozing surface from the irritation of the air, but care must be observed in making them weak and unirritating. With them

may be combined an antipruritic or germicide if it is considered advisable. In the more chronic forms, with infiltration and scaling, which, however, are rarely seen in infants, stronger applications are required to promote absorption of the infiltrate. In some cases the parts must be protected from all rubbing and scratching, especially at night. For this purpose, when the eruption affects the face and head, a cap and face mask prove useful. They not only prevent damage but also aid in retaining the dressings. Besides this it is often necessary to secure the hands by sewing or pinning the sleeves to the night dress or napkin.

After all local measures have been taken to prevent irritation and allay the itching, the internal treatment will demand attention. First in importance is the consideration of the patient, his heredity and constitutional tendencies, state of digestion, secretion and excretion. And the most efficient treatment and the most permanent cures will result from prescribing for the patient, and not basing the prescription on the mere appearance and location of the external lesion entirely: although local symptoms aid in completing the totality of the drug picture and help to proper drug selection. Rarely cases do occur where the eruption seems to be entirely due to some external irritant, and will rapidly recover on the removal of the cause and protection of the parts. Amongst the multitude of drugs which may be indicated in the treatment of this disease, in my hands the most frequently useful have been arsenicum, calcarea carb., rhus ven., graphites, hepar sulph., lappa off., psorinum, sulphur and viola tricolor.

CACTUS GRANDIFLORUS IN HEART DISEASE.—In a dissertation (St. Petersburg, 1905) devoted to this subject, Dr. G. B. Alexieff reports his experience with the drug, which was tested on 20 patients, presenting a large variety of cardiac lesions. It was found that cactus grandiflorus brings about an increased blood pressure in the central as well as in the peripheral vessels. Circulation is improved by it, diuresis becomes more free, while unfavorable by-effects are entirely absent. No cumulative action has been observed. All these features make cactus a desirable substitute and alternative for digitalis and adonis vernalis. The dose of the fluid extract of cactus grandiflorus is 20 to 30 drops, repeated 3 or 4 times daily.—Ex.—*The Southern Clinic.*

SOME HOMŒOPATHIC REMEDIES IN THE TREATMENT OF JOINT AND MUSCULAR AFFECTIONS.

BY

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To those of you who were so fortunate as to have heard some years ago that masterful presentation and study of homœopathic drugs in rheumatism and rheumatoid affections which the late Dr. Richard Hughes offered to the students of Boston University and the physicians hereabout, there is no need for me to offer an apology for not going over the same ground. Nothing which preceded, nothing which has followed in our literature can be compared to this, and we turn to it now in our daily practice as a storehouse of treasures for constant use.

It has seemed to me that the short space allotted to me might be profitably spent in the consideration of some less common drugs whose value in the treatment of joint and muscular affections is beyond question. A few years ago I presented before another society a brief but incomplete study of lactic acid in the treatment of rheumatoid arthritis. Foster says that "Richardson and Rauch have all demonstrated the power of lactic acid to produce joint affections in a more or less severe form." Dr. Hughes calls attention to the similarity between the lactic acid pathogenesis and rheumatic affections, but he also says that it is questionable if lactic acid being the *materies morbi* may not suggest the treatment of rheumatism by alkalies. In regard to this, Garrod says: "At the same time, the demonstration that lactic acid is capable of producing phenomena resembling those of rheumatism does not prove that it is the *materies morbi* of that disease, especially as its presence in excess in the blood or excretions of rheumatic patients has not been detected. It is perhaps worth mentioning in connection with the observations of Foster and Kulz, that the lactic acid which is supplied as a drug is the product of fermentation; and although its percentage composition, and even its rational formula, are the same as those of sarcolactic acid, which is the supposed rheumatic poison, the two bodies are not chemically identical."

Salomon also, who carefully tested for lactic acid the ven-

ous blood of six persons suffering from rheumatic fever, failed entirely to detect "even a trace of that substance."

Dr. Gannett, in a very interesting article in the *New England Medical Gazette*, giving his experience in the use of lactic acid in the treatment of rheumatism, and Anshutz in a recent work, cites seven interesting cases where lactic acid proved of great value.

It has seemed to me, however, that in that disease variously denominated rheumatoid arthritis, arthritis deformans, osteo-arthritis, there is a wider field of usefulness for lactic acid. It is, as you know, in truth a disease *sui generis*, and we are indebted to Bannatyne for a most exhaustive monograph on this subject. You may or may not accept his conclusions as to the microbial origin of this disease; but it is beyond question that his inferences, as well as those of Wohlman, are drawn from a series of most carefully conducted experiments. Nothing better illustrates one fact in medicine, that new things are not rare and that discoveries or experimentation seemingly along new lines are anticipated, than my own personal experience in the use of lactic acid in this disease. I was led to its use solely from a study of its pathogenesis, substantiated, to be sure, by two facts: First, the well known properties of lactic acid as a germicide, and the gross resemblance in the joints to those changes noted in rachitis, which, by Kussowitz were attributed to lactic acid.

In a recent issue of the "Ephemeris of Materia Medica," published in January, 1898, I find this article:

"Dr. Zolovatine reports (*La Medicine Moderne*, Vol. 8, Sept. 18, 1897,) having used this acid with agreeable success in a long-standing case of arthritis deformans. Ten drops of this acid were administered each day upon an empty stomach, no food being allowed for as much as an hour and a half after taking the dose. In this particular case the affection had existed ten years and the patient was compelled to keep in bed for the year just previous. The dose was gradually increased up to forty drops a day. The beneficial results of the acid were evident at about the end of three weeks. The pains in the joints were so modified that the patient was able to rise from bed and walk a little. The appetite improved and the abdominal pain entirely disappeared. Aside from this acid no other internal medication was attempted. Light massage was em-

ployed externally. Gradual improvement continued until the time when the report was made, when the patient could readily walk without a cane and attend to regular duties."

It seems to me there can be no reasonable interpretation of the use of lactic acid in the treatment of this affection other than according to the law of similars, and, while many may object to the dose used, I still believe with Dr. Burnett who said in speaking of *aurum metallicum* that "that dose should be used which was capable of alleviating the condition" and that the size of the dose did not "militate against its homœopathicity." It must be in the early recognition of this disease that one can hope for success in its treatment, although palliation is possible in any stage with lactic acid.

My early success with this method of treatment led me to hope that by a further study of the drug we should be able to state still more positively that lactic acid was indispensable in certain forms of rheumatoid arthritis. I have to confess that in a critical case of this trouble which was placed under my care lactic acid proved of absolutely no avail; and I can only attribute its uselessness to the very advanced stage of the disease in which it was applied.

A more recent case may be of interest: Miss —. Age, 33. First indication of the trouble began with itching in the heels, sensation of bugs under the skin. At this time the patient was working hard and devoting much time to her musical studies. Hydrotherapeutic measures, massage, proved of no avail. The trouble—stiffness, lameness and swelling began in the hands, then in the feet with inability to walk. The correction of a flat foot with proper support brought temporary relief. The hot air treatment with baking was then tried for some months with no relief. For the succeeding year she was treated with tonics, especially *chalybeates*, but with no result. When first seen, one year ago, the patient was on crutches, anæmic, complaining specially of pains in the knees and feet, there were present also the deforming changes incident to the disease, in the hands, specially about the phalanges. I learned that she had been under the care of one of the most skillful homœopathic physicians in New England for some time, and that the utmost care had been given to the dietetic measures. Lactic acid in second decimal dilution was given and very shortly the patient began to gain. The improvement was slow but unin-

interrupted, and now she walks with little effort and with no support, and it is reasonable to claim that the disease is arrested, though the changes which preceded this treatment are, of course, irremediable.

And now may I call your attention to a remedy, I should have said peculiar to the homœopathic school, or at any rate should have said so until the last year; when two articles, one in the daily paper, and the other in a medical journal, have led me to qualify this statement. The first says: "After long experiment by bacteriologists in their employ, an incorporated firm of wholesale chemists of this city has sent agents to Texas with instructions to obtain all the bee stings they can for medicinal purposes. An order for 50,000 stings was placed with one bee farmer in that state. A serum for injection through the skin will be made from the potent fluid with which the tiny weapons are charged. Of stings' efficiency for the cure of rheumatism the chemist says their experiments have left no doubt. The tale of how scientists hit upon the idea of experimenting with the stingers is told thus:

A farmer, afflicted with rheumatism, was set upon by a swarm of bees and frightfully stung. His face, neck and limbs were covered with red spots and swollen for days. When the swelling subsided, to the farmer's delight, the rheumatism was cured.

Supplemented by similar cases, this tale came to a man who was interested in bacteriological experiments. The loss of its sting, if carefully amputated, will not destroy the bee's honey-making ability. A special laboratory is being constructed near Philadelphia for the transformation of bee stings into a serum. The stings will be transported thither from the bee farms in air tight glass tubes in specially constructed cases, so designed that the temperature surrounding the tubes may be kept the same as that of the bee's body.

In its finished state the product will be sold in small vaccine points of the same form as anti-toxine and the small-pox virus. That an ample supply of the raw material may be available, the company will encourage the establishment of bee farms in Delaware and Chester counties and northern Delaware.

A second "Bee Stings for Rheumatism." Dr. Perc, of Marburg, delivered an address last week on the healing properties

of bee stings in articular and muscular rheumatism. He pointed out that it has been known from time immemorial as a cure among the poorer classes of people, who have no faith in medical science. He has tested it thoroughly and proved its efficiency in 500 cases. If a patient is suffering from rheumatism, the stung part does not swell at first, not until the bee poison is frequently introduced. Then the rheumatic pain gradually vanishes. Dr. Perc allows his patients to be stung at first by a few bees and then gradually increases the number. In one sitting he allows seventy bees to sting the patient. He describes the case of a woman who suffered excruciating tortures from rheumatism. In the course of treatment she was stung 6,952 times, and this resulted in a complete cure.

Properly indicated by its homœopathic symptoms *apis* has been used for many years by members of our school. But the old school still continues to 'discover.'

Apis mellifica we have always considered a remedy of the greatest possible value in œdematous swellings wherever located, especially when accompanied with stinging pains, intolerance of heat and thirstlessness. We are all familiar with its action upon the cellular tissue, upon the skin, upon the serous membranes and the mucous membranes, upon the glandular and lymphatic systems; but of its use in rheumatoid conditions we know less. There is a form of rheumatism for which we are occasionally called upon to prescribe which has certain peculiar characteristics of its own. The inflammation is confined to one joint; it is attended with swelling which rapidly supervenes with an œdematous condition about the joint first attacked, and with little or no discoloration. The pains are burning, stinging, and are unquestionably aggravated by hot applications. I am not prepared to say just what is the occasion of these attacks, but the close resemblance of the symptoms to those of *apis mellifica* have led me to its use in just such conditions, and invariably with success.

An old lady, 84 years old, during the past winter was attacked with severe pain and the accompanying symptoms in her wrist. Traumatism as a cause could be eliminated; the absence of any febrile condition and the general lack of constitutional involvement made the diagnosis of impending rheumatic fever untenable. I have never before or since seen such swelling of the hand and the fingers with the attendant dis-

comfort, and when I tell you that under the use of apis in seventy-two hours the whole difficulty cleared up you will not doubt my contention that the remedy was responsible for the change.

A more recent case in a lady who had within a year undergone an operation for a tubercular joint during the convalescence from an acute attack of grip, developed a very similar condition. The left wrist seemingly was the point of first attack; the involvement of the hand was within twenty-four hours, but the swelling did not extend upward. There was an equally ready response to the remedy in this condition, and with the previous history the result was particularly gratifying.

Of rhododendron, a little understood or a much neglected remedy in the treatment of rheumatism, I beg you will allow me to say a few words. In comparison with rhus tox., an old and tried friend in rheumatic troubles, we note the following.

Rhododendron — Pains do not admit of the limbs being at rest, and moving relieves at once.	Rhus tox.—First movement aggravates the pain, but continued motion only relieves.
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Rhododendron — Aggravation of the pains at night, but especially in the morning.	Rhus tox.—Aggravation of pain during evening and night.
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Rhododendron — Rheumatism especially in warm weather.	Rhus tox.—Rheumatism in the cold season.
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Rhododendron — Symptoms worse before a storm.	Rhus tox. — Symptoms worse after a storm.
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Cossacks and Mongolians, according to Dunham, use it as a specific in gout, and the proving made by Seidel made some years afterwards clearly shows its powers to produce rheumatism in its manifestations. The most characteristic symptoms are: Pains in the limbs and joints affected, chiefly the forearm and hand and the leg and foot. They seem to have their seat in the bone and periosteum, they attack but a small extent of the limb at once, the pains disappear and reappear capriciously, but they are always worse on the approach of bad

weather. The enlargement of the joints is produced by fibrinous deposits not by chalky excretions; sensation in the joint as if sprained with tearing and drawing pains. If I read aright the pathogenesis of rhododendron it has a limited sphere of usefulness in joint affections; but the wonderful influence of the drug in testicular affections and inflammatory changes about the epididymis have led me to test its value in that form of arthritis which occasionally is associated with gonorrhœa. In one very aggravated case in the hospital, where the inflammation was confined to one foot with a temporary suppression of the discharge, the aggravation toward morning, the tensive pains as if sprained, the pain shooting from ankle to knee and yet no involvement of the knee joint, speedily yielded to this remedy; and still more recently a middle aged woman who had passed the climacteric, and who because of the peculiar nature of the pains from knees to ankles, from wrist to elbow, had been treated for neuritis unsuccessfully by static electricity, was effectually relieved by rhododendron because of the concomitant symptoms.

Accuracy of diagnosis must or should be followed by accuracy in prescribing. Within twenty-five years orthopedic surgery has made such vast strides that one who pinned his faith upon Hilton, the staunch advocate of rest in the treatment of that disease, would be shocked at the modern methods. That success has attended them goes without question, and it is for us to determine, not only those conditions which are amenable with our better knowledge of remedial agencies, but also to reclaim if we can some of the conditions which neither surgery nor massage have ever reached.

CALCAREA CARBONICA: A PRACTICAL STUDY.

BY

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THE carbonates (of calcium, sodium, potassium, magnesium) may be termed chiefly kinetic agents in metabolic processes; catalytic in action, or, changing by katabolism into sulphates, phosphates, urates; absolutely essential to metabolism but not appearing as permanent tissue constituents or end-products. In the latter category we find the "ash" of the chemist—the sodium, potassium, magnesium, calcium phosphates, the chlorides, the fluorides, silica, iron.

According to Heitzmann, the "carbonate of lime is a rare alkaline sediment in urine, occurring either alone or in combination with the phosphates. This salt appears (in urine) mainly in inflammatory and carious processes of the bony system such as osteitis, osteomyelitis, osteomalacia and rachitis. It may also be found in diabetes and phthisis."

Calcarea carbonica is a fascinating drug because of this very instability, this kineticism, this pre-eminent function of influencing and carrying on but not completing metabolism. Problems in kinetics are infinitely more attractive and difficult than problems in statics, and the faculty of solving the kinetic problem in therapy belongs essentially to the homœopath, who is equipped with the instruments and with the instrumentation. At the command of the indicated remedy, whether *calcarea*, sulphur, lachesis, lycopodium, *et alia*, order is brought into the facile armies of cells of leucocytes and phagocytes, and they move their destined ways.

Hence the vast range of *calcarea carbonica* in infancy and childhood, when vitality is exuberant and untrained; hence its value in those deep disorders of metabolism where chaos builds its carcinomatous temples, upon whose altars are burnt the moaning hecatombs.

Theoretically, at least, sulphur and *calcarea* should precede any, as it were, organopathic prescription for cancer, and such are the multiform, polychrestic powers of these two drugs that a subkatabolic lesion of such import can hardly be imagined where these twain should not be successively indicated.

It is in the assimilation by the cells of the gastrically digested food that *calcarea carbonica* enters as a governing factor. Where cellular protoplasm can not reach out into the

blood and lymph streams, discriminatively grasp its nutriment, and build up its cell, or where it does these things chaotically, we have the ill-defined, because profoundly cellular, cachexia of scrofula, the tubercular diathesis, rachitis. In leucophlegmatics, in women and children, in plethoric, catarrhal subjects calcarea carbonica is indispensable, and no remedy, not even sulphur, better illustrates the dynamic energies of the 200th potency.

Case: Susie M., aet. 16, renal colic every 3-5 weeks, soothed by morphine until the calculi worked down the ureter, and surgically advised to part with her sinister kidney. Lackadaisical, brunette, pallid, with a hand like a wet dish-rag, fond of ham, chalk and slate pencils. When seen, one of the familiar attacks was in rapid evolution. *R* calcarea carbonica (of the so-called "cm" potency), a powder every 15 minutes. The attack halted and cleared away in an hour. The urine for several days afterward was turbid, with calcium carbonate and phosphate. Several powders were left, with instructions to take, for the next attack. Six months later the girl was seen, but she had had no other attacks. A year later she was still free—also much better looking.

CALCAREA CHARACTERISTICS.

1. Great sensitiveness to cold, to damp cold, and easily catching cold.
2. Too early, profuse and protracted menses.
3. Leucophlegmatic, plethoric, catarrhal.
4. Dentition complaints—otorrhœa, diarrhea; too slow or too rapid dentition; chewing motion during sleep.
5. Glandular swellings (especially about the neck).
6. Diarrheic tendency; afternoon diarrhea.
7. Limp, sweaty hands and cold, damp feet.
8. Longing for eggs; aversion to meat, (Ferrum: aversion to eggs and to meat).
9. Local frigidities (abdomen, vertex, feet).
10. Skin heals poorly; urticarial tendency.
11. Sourness:—Sourness exudes from the emunctories, is vomited, sweated, urinated and defecated—a chronic rheum.
12. Chiefly right-sided—like belladonna, its acute congener.
13. Sprains, dislocations and their results—when rhus fails.
14. Loose-jointed; easy dislocations.

INDEX CLINICUS.

Amenorrhœa.—In plethoric or scrofulous girls with various complaints as if the menses were about to begin. Suppressed menses from working in water, with anasarca.

Asthma.—Attack early in the morning, muscles lax, sensation of dust in respiratory passages. Inveterate senile asthma with early A. M. attack.

Carcinoma Uteri.—Burning soreness in genitalia, aching in vagina, profuse menses, intermenstrual bleeding, vertex coldness; great sensitiveness to cold air; catches cold easily.

Cephalalgia.—Chronic: after suppressed eruptions. Strange feeling of coldness in some part or all of the head. Pain <from early A. M. after waking until afternoon. Sweaty hands and feet.

Chlorosis.—Scrofulous diathesis. Tendency to colds and diarrhœas. Spinal weakness or curvature. Disgust for meat; craving for *sour* and indigestible things (chalk, coal, etc.), for *eggs*. Menses too often and profuse, or, absent. Shortness of breath; muscular weakness; hands and feet cold and damp. Mind full of imaginary things that might happen to her.

Cholera Infantum.—Stools whitish, watery, more frequent in the P. M.—often of a sour odor; sour vomitus; great emaciation, bloated belly, old wrinkled face. Child looks anxious *when lifted up*. (Borax, when laid down.)

Constipation.—Hard, large, partly undigested stools. Feeling of faintness after stool. Rectal oozing, with an odor of herring-brine. Restless sleep after 3 A. M.

Convulsions.—Anterior fontanelle open; glandular swellings about the neck; head sweat; hard, swollen belly; diarrhetic. Often indicated after Belladonna, and the greatest chronic remedy in dentition.

Enteralgia.—Severe spasms, especially evening and night, coldness of the thighs, feeling of coldness in abdomen; enlarged and hard abdomen, particularly during dentition; head sweat; diarrhetic, clayey, sour or fetid stools.

Epilepsy.—Causes: fright; protracted intermittent; suppression of chronic eruptions.

Modalities: <during the solstice and full moon, <from chagrin, fear, <from drinking cold water.

Prodromal: Chewing motion; stretching of the limbs;

great unrest; palpitation; aura of something running down the arm or down the abdomen to the feet or like a mouse up the arm.

Epidromal: Headache; dizziness; head sweat; great thirst; buliuria; vomiting and diarrhea.

Concomitant: Stupid, peevish, anxious; vertigo; headache before breakfast; pale, puffed face; easy head sweat; eats much but emaciates; menses too long and profuse; swollen cervical glands.

Hematuria.—Chronic; hemorrhoidal; polypous; leucophlegmatic.

Hemorrhoids.—Profuse bleeding, protruding. Menses too early and profuse; habitually cold, damp feet; offensive foot sweat.

Leucorrhea.—Mild, milky discharge, during micturition, or, flowing only in spells, profuse. Menses too early and abundant. Pale face; weak feeling in the chest, especially when talking; weakness of knees; emaciation.

Metrorrhagia.—Climaxis: chronic metrorrhagia mixed with leucorrhea—previously always inclined to profuse and protracted menses.

Osteitis.—With swelling. Caries and necrosis in scrofulous patients. Diarrhea; bloated belly, chronic scalp eruption; emaciation.

Otitis media.—Purulent discharge. Mostly right ear. Swollen cervical glands.

Peritonitis.—The pain is >by cold water applications, which the patient wants constantly renewed.

Phthisis.—Cough <in A. M.; loose, moist rales. Sweats easily with fatigue from slight exertion. Cerebral congestion. Menses too early and profuse. Diarrheic.

Rheumatism.—Chronic arthritis, with swollen joints, <from every weather change. Also rheumatism of the right shoulder, or, from the left shoulder down the arm and internally toward the heart; lumbago. Frequent sensation of coldness at the vertex; profuse sweat and coldness of the feet.

Sciatica.—From working in water. Complicated with vertebral disease. Pain starts from lumbar spine, extends down the limb, with a feeling of constant uneasiness.

Typhoid.—Obese patients. Utter sleeplessness from over-activity of the mind. *The same disagreeable idea* wakes the patient as often as he falls into a light slumber.

Valvular disease.—Trembling pulsation <after eating, <at night, with anguish. Menses too early and profuse.

Worms.—Headache, dark rings about the eyes, pale, bloated face, thirsty. Bloated belly; aching about the navel; diarrhea. Easy sweat from motion. Scrofulous diathesis.

COMPARISONS.

*Calcareo.**Lycopodium.*

Deeply constitutional.	More organopathic — liver, kidney, bladder, stomach, skin.
Menses too soon and <i>profuse</i> .	Menses too soon and scanty.
Erethistic stage of acute cerebral disease.	Brain troubles with somnolence.
<in open air.	>in open air.
<after eating.	Ditto.
<after mental exertion, but of a dull intellect.	<after mental exertion, but keener of intellect.
<A. M.	<4-8 P. M.

*Calcareo.**Silica.*

Leucophlegmatic, plethoric, obese, weak-muscled, not irritable—neural torpidity.	Thin, dry-skinned, lax muscles, nervously irritable—neural hypersensitivity.
Mucous membranes and glands	Fibrous structures, cellular tissue.
Concerned about bodily welfare.	Concerned about spiritual welfare.
<in wet weather.	<in dry weather.
<from atmospheric changes, especially from cold damp.	<from electric changes, in changeable weather, in stormy, windy weather.
Mucosal inflammation with increased secretion of <i>mucus</i> .	Mucosal inflammation with no secretion or with <i>serous</i> secretion.
Scrofulous glands.	Scrofulous osseous or fibrous structures.
Myxomatous (m u c o u s) polypi.	Fibrous growths, indurations.
Osteal diseases.	Periosteal diseases.

*Calcarea.**Sulphur.*

> When standing erect.	> When stooping or sitting.
Mild mucosal secretions.	Acrid mucosal secretion. In-
More often indicated in the young.	dicated in all ages.
Burning of palms and soles.	Ditto.
Dish-rag hands.	Lean, hard, bony hands.
< A. M.	< P. M. and evening.
< in open air.	> in open air.
Leucophlegmatic, with a tendency to P. M. diarrhea.	Venous constitution, addicted to piles, with costiveness or a 5 A. M. diarrhea.
Anxious about bodily welfare.	Anxious about spiritual welfare (Silica).
Chronic (congenital hydrocephalus).	Hydrocephalus develops slowly after suppressed skin disease.
Headache > lying down.	Headache < lying down.
great sensitiveness to cold, moist air, or to the open air.	Ditto, but likes dry, open air.

COMMUNICATIONS

OAKLAND, CAL., May 4, 1906.

EDITOR THE HAHNEMANNIAN MONTHLY:

Through the Associated Press an appeal is being sent all over the country from "The Meissen of California" for contributions to be used as a fund for the benefit of any destitute homœopathic physicians of San Francisco.

As its president, I have been requested to write to the Editors of every homœopathic medical journal of the country asking them to make an immediate appeal through their journals for contributions to this most necessary and worthy fund.

"The Meissen of California" is an organization of the women in the families of the members of the California State Homœopathic Medical Society, and we feel it a duty to do all in our power to alleviate the loss and suffering of the members

of our school and their families caused by the recent deplorable calamity in San Francisco.

Very sincerely yours,

ELEANOR F. MARTIN.

Kindly send all communications and contributions to Dr. Eleanor F. Martin, Delger Building, Broadway and 14th St., Oakland, Cal.

JAMES LICK EMERGENCY HOSPITAL,
CORNER NOE AND TWENTY-FIFTH STREETS,
SAN FRANCISCO, CAL., April 30, 1906.

EDITOR THE HAHNEMANNIAN MONTHLY:

In helping others the doctors should not be overlooked. Most of the physicians of this city have not only lost their entire office equipments but their homes as well. Yet in spite of these losses they are nobly devoting their services to the relief of the sufferers here. Are you doing anything in the East to relieve your needy professional brothers? If not let us immediately start a relief fund for the doctors here irrespective of schools. Will you not use the pages of your journal freely, urging all subscribers and their friends to give liberally, if not in money then in office equipment, books, instruments, etc. As a Pennsylvania physician I will gladly cooperate with you. Dr. J. W. Ward, president of the Board of Health of this city, is the man of the hour. Every physician serving the people here wears on his hat a placard signed by Dr. Ward. It is a great honor to the homœopathic profession to be represented in official matters by such a man as Dr. Ward. My home address is Palo Alto, California, and I stand ready to do all in my power jointly with you or with persons whom you may name to help our worthy brothers of the medical profession.

Very truly,

JNO. W. COOLIDGE, M. D.,
Physician in charge Emergency Hospital,
Health Commission.

EDITORIAL

REMARKS ON THE TREATMENT OF CANCER.

EACH decade of medical history has produced its "cancer cure." Every method that is advanced has attached to it its list of "cures," but, unfortunately, up to the present time the results of extended and impartial trial have never confirmed the favorable results obtained by the discoverers of these methods.

The history of the various agents which have been used to remove or to destroy malignant growths is interesting, if not very profitable, reading. There is scarcely a remedy in the entire materia medica which has not at some time or other been lauded for its beneficial effects in the treatment of cancer. Ordinary sand, toads, and the excrement of animals have all been highly recommended. In 1781 Flores advocated the flesh of gray lizards and Bayle had a patient who swallowed more than four hundred of these lizards in two months without any benefit. At one time it was believed that cancer was due to the formation of an acid in the tissues and in 1698 Alliot advised the use of an alkali in order to antidote the supposed acid. Ammonia was therefore used both locally and internally. Vogel in 1769 wrote a book in which he claimed that lime water was an effective cure for cancer. Conium was strongly advocated by Storck in 1761 as an almost infallible cure and this drug was very widely used. Twenty-five years ago Chian turpentine attained a wide reputation in the treatment of cancer, but its popularity was short-lived. In more recent years the attention of the profession has been directed to the use of the X-rays and other photo-therapeutic measures. The beneficial effects of these measures in superficial growths of a malignant character are now definitely established.

It is only to be expected, considering the trend of modern therapeutics, that the use of serums should be advocated in the treatment of malignant growths. Doyen prepared an anti-cancerous serum from a micro-organism which he named the

bacillus neoformans and reported favorable results from its employment. Paine, Morgan, Jacobs and Greets have experimented with this serum and agree that it is valueless as a curative measure.

In America the method which has attracted the most attention during the last few years has been the injections of the mixed toxins of erysipelas and the bacillus prodigiosus as advocated by Coley of New York. In the March issue of the *American Journal of the Medical Sciences* Coley has presented a detailed account of his results from the employment of this treatment, and they are such as to demand careful consideration. His attention was first attracted to the possible usefulness of the toxins of erysipelas in retarding the growth of malignant neoplasms by the observation that a case of malignant round-celled sarcoma of the neck, which had been operated in the New York Hospital with recurrence four times, entirely disappeared immediately after two attacks of erysipelas. The patient left the hospital in good health, and was alive and well seven years later. Shortly after this an inoperable spindle-celled sarcoma of the tonsil and glands of the neck came under his observation. He succeeded in producing an artificial attack of erysipelas in this case by injecting seven minims of a bouillon culture under the skin. The attack was severe and lasted ten days. During this time the tumor in the neck broke down and discharged freely, while the tumor in the tonsil rapidly diminished in size. At the end of two weeks the tumor in the neck had disappeared entirely, and the growth in the tonsil became small, hard and fibrous. The patient regained his usual health and remained well for eight years. At that time there was a local recurrence in the tonsillar tumor which proved fatal.

Dr. Coley continued his treatment by the artificial production of erysipelas until he had experimented on ten cases. From these cases he was able to draw the following deductions: *First*, that it is extremely difficult to produce erysipelas at will; and, *second*, that the curative properties of erysipelas are derived, in a measure at least, from the toxic principles of the streptococcus, that might, hence, be utilized without an actual attack of erysipelas. It was then found that injection of the toxins obtained by sterilizing by heat fluid bouillon cultures of the streptococcus of erysipelas gave rise to all the symp-

toms of a true attack of erysipelas and could be easily controlled. The efficiency of the erysipelas toxins was found to be intensified by combining with them the toxins of the bacillus prodigiosus.

Dr. Coley explains the actions of the toxins upon the following theory. He assumes that malignant tumors are caused by some micro-parasite, and that the toxins of erysipelas bring about such changes in the blood serum as to destroy these parasites or to inhibit their growth. He explains the frequent failure of the toxins to prevent the progress of the new growth by assuming that in such cases the virulence of the parasites is so great that the changes brought about in the blood serum are unable to destroy the parasites.

Experience has shown that the curative action of the toxins is most marked in sarcoma, especially in the spindle-celled variety. Its effects on carcinoma are very uncertain.

The final test which we must apply to this, as well as to any other therapeutic measure, is, what are the results of this treatment? That an attack of erysipelas is capable of curing a certain type of malignant neoplasms is undoubtedly established. Coley has collected some forty-four authentic cases in which an attack of erysipelas occurred, either by accident or design, in patients suffering from malignant disease. The attack occurred accidentally in twenty-seven, and as the result of inoculation in seventeen. Twenty-two of these were carcinoma or epithelioma, eighteen were sarcoma, and four were doubtful. Of the cases of carcinoma and epithelioma, seven were permanently cured, the remaining fifteen were temporarily improved. Of the eighteen cases of sarcoma, eight, or forty-four per cent., were well and free from recurrence from one to eight years after the attack.

In his personal cases Coley has had thirty-six cases in which the growth disappeared under the injection of the mixed toxins. Five of these had recurrences. Twenty-six were alive and in good health from three to thirteen years after the treatment. These cases have all the more weight when we consider that they were advanced cases and were regarded as hopeless from an operative standpoint. From the published reports and personal communications of other surgeons who have tried this method of treatment, sixty cases of partial or complete success have been collected. Of these twenty-seven

were alive and well from three to twelve years. Of the successful cases nineteen were intra-abdominal growths.

If the statistics above referred to are reliable, and we have every reason to believe that they have been carefully collected and that the diagnosis was well established in every case, we are justified in drawing the following conclusions:

First, that an attack of erysipelas is capable, under certain conditions, of causing the disappearance of malignant neoplasms.

Second, that the same effects are also attainable by the injection of the sterilized toxins of the streptococcus of erysipelas.

Third, that with proper attention to method of administration and dosage, the injection of these toxins is devoid of danger, and the severity of the reaction is readily controlled by increasing or diminishing the dose.

Fourth, that the beneficial results of the injections are more manifest in cases of sarcoma than in carcinoma.

Fifth, that while we have no method as yet of determining in an individual case whether the treatment will succeed or fail, the percentage of favorable results are such that we are warranted in giving it a trial in all cases of inoperable malignant growths, especially in sarcoma.

Sixth, that the method appears to be of value in preventing recurrence after the partial or complete removal of malignant growths by surgical means.

HIBBERT vs. MADDUX.

THE second trial of this celebrated case—the first jury having failed to reach an agreement, resulted in a verdict for the defendant by order of the court. The facts as reported in the newspapers are of more than ordinary interest to the medical profession.

The action was one for \$20,000 damages against Dr. D. P. Maddux, surgeon in chief of the J. Lewis Crozer Hospital, at Chester, Pa. It was claimed by the plaintiff that his daughter's death resulted from an operation for appendicitis performed by Dr. Maddux, without the consent of either of her parents. It was in evidence that the patient was 15 years of age; that on the 25th day of August, 1903, the day before

Dr. Maddux was consulted, she took a trip on the Steamer Republic to Cape May, and that while on this trip was taken sick in a manner similar to that observed by the plaintiff's witnesses on several previous occasions. These various attacks of illness had been diagnosed, according to Mr. Hibbert's testimony, by a certain Dr. Bird as indigestion. Both the father and mother testified before the court that it was against their will that the patient was removed to the hospital, and also without their knowledge she was operated upon. On the second day after the girl's arrival at the hospital, *i. e.*, August 27, Dr. Maddux operated, and the patient died fifteen hours thereafter. The plaintiff denied positively that any attempt was made to reach him by phone, and he furthermore claimed that the case was one of latent Bright's disease, and that there were no signs of appendicitis.

Up to the time of this illness, a certain Dr. William Bird had been the family physician. The uprejudiced looker-on would most naturally wonder why if his services were satisfactory, the family or a member thereof should have called in Dr. Maddux. The only alternative is that knowing Dr. Maddux to be a surgeon, they considered he would be able to handle the case surgically should occasion demand it. At any rate, it seems that said Dr. Bird was ignored at the time.

At the trial, said Dr. Bird was the only medical expert for the plaintiff. He made the remarkable statement that the deceased was suffering from acute Bright's disease, and that she presented unfavorable symptoms making her ultimate recovery doubtful. And yet the doctor also testified that he had discontinued his services on the 19th day of August, 1903. It certainly seems strange that he should have done this if she had "unfavorable symptoms which would make her ultimate recovery doubtful," or that while suffering from such symptoms he should permit her to be taken on an all-day steamer excursion.

Then a sister testified that the deceased had been taken sick on the steamer, and that an officer of the boat had attended her, but denied that a hypodermic of morphia had been given to allay the pain. The witness recognized a young man in the audience, who afterwards proved to be Dr. Ralph Bernstein, as the officer in question. Other members of the family testified to the effect that an operation had positively been forbidden.

The defence then opened with Dr. Maddux on the stand.

He testified that at his first examination, he made a diagnosis of appendicitis. He was sent for again later in the day and found the patient to be worse. He warned the family of the state of affairs and thought that she should be in the hospital where she could be watched carefully and an operation performed should such become necessary.

The father, mother and aunt asked if the operation could not be performed at home. The entire family said at several times that they wished to avoid an operation. The doctor suggested that the best thing to do was to operate at once. The parents, however, told him that the operation should not be performed unless it were a direct question of life or death. The father, Mr. Hibbert, then said to the doctor, "I place her in your hands, do the best you can with her and don't operate unless it is a question of life or death."

She was taken to the female surgical ward of the Crozer Hospital. The next morning she had again become worse to an alarming extent. From her symptoms he saw that peritonitis had set in. Dr. Webster and Dr. Crowther made examinations of the girl before the operation and all three agreed that the only possible way to save her life was to operate. Before the operation, Dr. Maddux testified that he had a talk with Reba and that she consented to its performance.

The doctor then telephoned the uncle, William Devers, that the operation must take place. Fully three-quarters of an hour elapsed between the time of telephoning and the actual time of incision, so that the family might have objected had they seen fit. Drs. Webster, Dudley, Perkins, Crowther, Massey and Starr, (the latter deceased) were present at the operation, besides various nurses and attendants. Drs. Webster and Crowther assisted in the operation. Various adhesions showed that there had been previous attacks of appendicitis.

Until he saw the father and brother of the dead girl, he heard nothing about any dislike to the operation being performed. Until a number of Chester attorneys had turned the case down, the doctor said, he did not know that anyone took any exception to his having performed the operation, which remark, counsel for the plaintiff, Mr. Alexander, asked to have stricken out.

On cross-examination, Dr. Maddux stated that he preferred to telephone the Hibberts rather than visit them as they were

such a nervous, excitable family. Mrs. Hibbert had said, "A person wouldn't have to know very much to know as much as Dr. Maddux," and the father, after the girl's death said he was sorry they had let the doctor perform the operation.

The doctor declared that the girl died from blood-poisoning due to mortification of the appendix. Mr. Alexander then asked, "But blood-poisoning sometimes results from unskillful operations?" "Yes," quickly replied the doctor, "but it takes forty-eight hours to develop from the time of the operation." Miss Reba died within fifteen hours from the time of the operation.

Dr. Ralph Bernstein, of Philadelphia, then took the stand. He is a University of Pennsylvania graduate, class of '03. On the August day in question, Dr. Bernstein was working on the Steamer Republic. The stewardess came to his room and sent him to the ladies' cabin, where he saw the sick girl lying on a cushioned locker. Her right leg was drawn up to her abdomen, a symptom of appendicitis. He took her temperature, which was 104 degrees, with a clinical thermometer. The two sisters were right there, he said, and they saw this examination and they gave him their names. All this they had previously denied. He then gave Reba one-quarter grain of morphine, injected under the skin of the wrist. He told them that the girl was desperately ill and asked their permission to take her to the University Hospital.

There then followed a number of medical witnesses for the defence, including noted surgeons of both schools of medicine in Philadelphia and elsewhere. They one and all agreed that the case was one of appendicitis, that an operation was imperative, and that its performance was necessary. Several witnesses who had seen the gangrenous appendix testified to that fact.

The judge in charging the jury said that before damage could be awarded, damage must be shown, and as the undisputed testimony was that the patient died of blood-poisoning after the operation, and as the operation had not caused, contributed to or hastened death, no actual damage resulted and the nominal trespass, if it did occur, died in law with the one upon whom that trespass occurred. He concluded by saying that under the law and evidence, he would order a verdict for the defendant. This was done, and so ended a most important medico-legal case.

The case was rendered doubly interesting by the way the old school medical profession of Delaware County rallied to Dr. Maddux's support, as was recorded in our news pages for May.

It is a matter for sad comment that a case presenting such weak evidence for the prosecution should have found an attorney willing to prosecute it.

The real question involved, the operation without consent, does not seem to have entered to any great extent into the court's charge. The trend of the evidence, both direct and inferential, was to the effect that consent had been given should operation prove necessary. If Judge Johnson's ruling is sustained by decision of other courts, the case of *Hibbert vs. Maddux* will have most important results. The learned court relegated the question of consent to the background, and rested justice entirely upon the question as to whether Dr. Maddux had done right or wrong in operating. The evidence showed he had done right, and accordingly the action for trespass failed.

We have noted that for some years past surgeons have been fearful of operating under certain emergencies without having first obtained full consent of the family of the patient. That their fear was well grounded is shown by the Maddux case. Within our knowledge is a case of a young man playing at football, and who sustained a spinal injury plainly a meningeal hæmorrhage. The surgeons at the hospital to which he was taken waited from 4 P. M. until 11 P. M., to find a relative who would give consent to the operation. The patient died without operation.

In another case occurring in a Philadelphia hospital, a young man sustained a serious head injury. His relatives would not consent until the family physician could be consulted. When he was found, the case was too near death to permit operative interference.

Several years ago, we were concerned in an emergency case, in which with the surgeon, we acted according to our judgment. A young man sustained a severe head injury which was plainly a meningeal hæmorrhage. The surgeon operated at once without notifying the family owing to the urgency of the case, and a life was saved. Everyone was satisfied in view of the favorable outcome. How it would have been, had the result been otherwise, it is hard to say.

A surgical friend was consulted by the friend of a minor suffering from a severe appendicitis. The friend agreed to stand the responsibility for the consent, and wired the family. Just as the surgeon finished the operation, the father replied, "Do not operate; am coming with my own surgeon." The result of the operation was perfect, and everyone was satisfied.

To one of intelligence, it seems difficult to understand how a suit like that against Dr. Maddux could have been brought. Certainly no one ever thinks of suing a physician for administering medicines without consent, and yet we all know that as great, if not greater harm, can be done with drugs as with the knife. As an example we might instance the prescribing of nitrate of amyl to patients already suffering from low blood pressure.

Again it seems to us that the engagement of a physician takes with it as part of the contract, the acceptance of that physician's advice. If his advice is not liked, he should be dismissed. The continuance under the charge of that physician, is, to our mind, equivalent to consent.

As we read the testimony in Dr. Maddux's case, we note that he surrounded himself with every safeguard by calling a consultation with the other surgeons of his hospital, notwithstanding which an annoying and costly suit was forced upon him.

AN APPEAL FROM SAN FRANCISCO.

The letter from the "Meissen of California," as well as the communication from Dr. Jno. W. Coolidge, both of which will be found in another portion of this journal, serve to impress upon us the dire need of our professional brethren in San Francisco and the straits to which they have been reduced.

No other class of professional men suffered so general and so irremediable loss from the fire as did the physicians. Not only have they lost their office fixtures, their instruments, their libraries, but their diplomas, without which it is impossible for them to obtain licenses to practice in other States, have been destroyed. Thus without proper facilities for carrying on their work and with many of their patients scattered or left penniless, the outlook for medical men for some time to come is most unpromising.

Now that the excitement and emotional sympathy which

immediately followed this terrible catastrophe has died away, let us not forget that our help is still needed, and let us not fail to express our sympathy in a substantial and practical manner. Contributions may be forwarded through the "Meissen of California," or through the presidents of any of the State or County medical societies. Those who cannot send money, can assist their medical brethren by forwarding books, instruments or office fixtures, all of which are needed and acceptable.

A CORRECTION.

DR. E. FORNIAS, in an article entitled "Symptomatic Prescribing," published in the March issue of the *HAHNEMANNIAN MONTHLY*, referred to some researches with our drugs to prove their existence in the high dilution and attributed them to Dr. E. Vannier of Rouen. Dr. Fornias requests us to state that he was unintentionally mistaken in regard to the author of these experiments, and that the correct name of the physician who conducted them is Dr. Leon Vannier of Paris.

ARTERIAL PRESSURE DURING PREGNANCY AND THE SEQUEL OF LABOR.—During pregnancy, the tension is of 12, 13 or 14 c.m.; during labor, this pressure, which rises to 19 or 20, at the outset, redescends; ascends again to about 23 or 24, and comes down once more to 16 or 17. At the time of delivery there is a new hypertension, then the pressure returns to the normal from the following day, therefore there is no physiological hypertension neither during pregnancy nor after labor, only the efforts of delivery produces it momentarily. Drs. Vaquez and Lequeux found in nine cases of eclampsia a hypertension of from 6 to 13 c.m.; that is to say, that the pressure rose, instead of 12 to 14, to 19 to 27 c.m. Any woman who presents a hypertension is threatened with eclampsia, and as long as the tension does not return to the normal, there is danger for the patient.

GLEANINGS

THE ORIGIN OF HEMATOCELE.—By the term hematocele is generally understood an encapsulated hemorrhage into the pelvic cavity. Much more applicable than the former designations of hematocele retrouterina, anteuterina, lateralis or periuterina, is the term introduced by Sanger of hematocele peritubaria. According to Sanger also we distinguish between the diffuse form penetrated by adhesions, and the solitary variety which is a single round blood tumor enclosed in a capsule. It is now certain that a hematocele is almost always the result of a tubal pregnancy. The other causes to which it was formerly ascribed, are the exceptions. Nevertheless we should always endeavor to obtain exact anatomical proof in the elements of pregnancy and not throw out of account the exceptional cases. Attention should be directed to hemorrhage from the non-pregnant tube in salpingitis hemorrhagica and to hemorrhage from heart diseases. According to our more recent views, depending upon the work of Werth, we know of the mechanism of hemorrhage into the pelvic cavity in consequence of tubal pregnancy and tubal abortion, and the erosive action of the growing ovum. In connection with tubal abortion we know of the formation of the hematoma from successively recurring hemorrhages, as also of the formation of hematoma-moles and the manner in which the ovum leaves the tube being associated with hemorrhage into the abdominal cavity. When the tube ruptures it is also important to know the various ways in which this may occur, as also of primary and secondary rupture. It has been shown that Schroder's views of a hematocele developing beneath an old, primary complete sacculation is only true of the exceptional cases. The sac of a hematocele is not the cause, but the consequence of the hemorrhage. Veit has shown that previously existing adhesions favor coagulation and encapsulation. But it has also been proven that the previous existence of adhesions is not necessary for the formation of a hematocele. Other authors have also pointed out the possibility that the admixture of tubal secretion or of ovular portions may influence coagulation and capsulation; and Busse has suggested that chronic inflammatory changes of the pelvic peritoneum impair its resorptive powers. Werth does not believe that chronic inflammatory processes always accompany the first stage of tubal pregnancy. It is generally held that the coagula themselves cause the formation of adhesions. A larger collection of blood may occur in the pelvic cavity where there are no loops of intestines to favor coagulation. It is questionable whether the conditions for absorption are equally favorable in the pelvis as in the upper part of the abdominal cavity; the influence of peristalsis is also absent. The author also reports some experiments upon animals the results of which may be summarized by saying that they in the main confirm and emphasize the above statements.—*Zentralbl. f. Gyn.* 1905. 1365.

THEODORE J. GRAMM, M. D.

METRRORRHAGIA MYOPATHICA.—Anspach (Philadelphia) defines this as a form of hemorrhage which is independent of the usual causes of metrorrhagia, and is produced by a pathologic condition of the uterine muscle. This symptom, metrorrhagia, usually manifests itself toward the close of the childbearing period, and in the absence of the accepted causes, it often remains an enigma, and then is often spoken of as an apoplexia uteri, endometritis senilis, preclimacteric bleeding, &c. But apoplexia uteri presupposes arteriosclerotic changes with an actual rupture of one of the unhealthy vessels. Such a condition has not been observed in 300 specimens examined. Arteriosclerosis in the uterus has not the significance it takes elsewhere. It is the result of the development and subsequent involution of the blood vessels, indelibly associated with pregnancy and the puerperium, and occurs normally in every parous uterus and may have no more pathologic import than has the general arteriosclerosis of the aged. There is no lesion of the endometrium characteristic of age, but atrophy, and this is normal. Pre-climacteric bleeding is a specious name given to cases of metrorrhagia myopathica which conveys no meaning but the period of life at which the hemorrhage occurs.

The author's painstaking histological work is described and well illustrated, but the results so far attainable are not as definite as could be desired. His conclusions, however, are: Metrorrhagia myopathica stands for a distinct class of cases which have heretofore been variously and incorrectly grouped as above stated. It represents a symptom immediately dependent upon an anatomical and physiological lesion of the uterine muscle. No anatomical lesion has as yet been demonstrated, but it will probably be found in the elastic tissue constituents of the vessel walls and the subserous and supravascular layers. The physiological lesion is most likely an insufficient contractile power of the uterus. It is possible that the condition is purely functional and that there is no anatomical change which can be recognized. In cases of metrorrhagia myopathica the uterus is enlarged and softened; the os is patulous. The disease does not occur in nulliparous women and therefore it must have some connection with the childbearing period process. The diagnosis is only justified when all other possible causes for uterine hemorrhage have been excluded. This cannot be too strongly urged, especially in reference to carcinoma. The terms apoplexia uteri, senile endometritis, and preclimacteric bleeding as applied to these cases are incorrect and unscientific. While curettement, atmospheric, &c., have little effect in cases of metrorrhagia myopathia, palliative measures should always be tried before adopting hysterectomy.—*Amer. Jr. Obs.* Vol. LII, 1.

THEODORE J. GRAMM, M. D.

OVARIAN TUMORS WITH REFERENCE TO MALIGNANCY.—Norris (Philadelphia) reports the complications occurring in sixty-three cases of ovarian tumors and from a study of these he concludes that one in every four to six cases of tumor of the ovaries is malignant, and that this proposition is sufficient to warrant the treatment of all cases of ovarian tumors as malignant until proved otherwise. The operative mortality in cases of malignant disease of the ovaries should not be above 10 to 12 per cent. The number of cures at the end of five years will be relatively small. Carcinoma is

by far the most frequent and most dangerous of the malignant diseases of the ovaries, and the recurrences will be largely due to this condition. Every case of ovarian tumor should be operated upon at once, unless there is some strong counter indication for the same. The so-called "borderline cases" should be operated because the case may present all the clinical evidences of malignancy, and on operation prove benign, or the gross specimen may even, together with the clinical symptoms, appear malignant, and on histological examination prove benign; this is especially true of the adenopapilloma, which frequently grossly and clinically so closely resemble adenocarcinomatous papilloma. An exploratory laparotomy and the removal of ascites will make many cases more comfortable, and should certainly be performed when there is any doubt whatever as to the absolute diagnosis of malignancy. All ovarian tumors should be subjected to a rigid microscopic examination, and in cases in which there is any doubt as to the character of the tumor, a large number of sections should be taken; this routine probably in part explains the high per cent. of malignancy occurring in the series of cases reported in this paper. The author further concludes that parovarian cysts are far less dangerous than true ovarian cysts. In his nineteen cases there were no complications and no malignant degeneration. Torsion, next to malignancy, is the most frequent and dangerous complication occurring in ovarian tumors, and it occurs in a mild form more often than is generally supposed. The author believes that one-third of the cases he has reported would have died within a short time without operation. He also thinks that the operative mortality for all ovarian cysts should be under 8 or 10%. In his series it was a little over 3%. For malignant tumors of the ovary the mortality should certainly be under 10 or 15%, and early diagnosis and immediate operation on all new growths of the ovary will greatly reduce this proportion.—*Amer. Jr. Obs.* Vol. LII, 30.

THEODORE J. GRAMM, M. D.

HEPATOPTOSIS, GLENARD'S DISEASE, AND MOVEABLE KIDNEY.—The symptoms which may arise from the abnormal descent of one or more of the abdominal viscera are so various and vague that the sufferers are often put down as neurotics; but Watson Cheyne believes that in many of these cases the supposed hysterical ailments are very real. He advises fixation of the kidney by operation when it is moveable and causing symptoms, and thinks that most of the failures after nephrorrhaphy are due to the kidney being sutured too low down or that the kidney condition is only part of a general enteroptosis. Hence before operation this condition should be carefully studied and if there is evidence of hepatoptosis or enteroptosis, these must be attended to before the kidney is dealt with.

Hepatoptosis is to be distinguished from simple dislocation of the liver, for in the former the liver is rotated forward and to the left, so that the right lobe may reach the pelvis and the left lobe be in the right hypochondrium in bad cases.

The symptoms are very vague but there are usually various gastric troubles, such as meteorism, vomiting and dyspeptic symptoms. A general sense of abdominal discomfort is often present from the weight and faulty position of the liver. The physical examination will give a positive

diagnosis and it should be made with the patient in both the recumbent and erect postures.

The treatment usually consists of a rest cure and the employment of abdominal belts or bandages. The author has recently made two attempts to fix the liver in its normal position, and in both cases, at first at any rate, with remarkable relief to the patients. The liver should first be replaced by rotation backward and to the left and should be retained by sutures. In the second case, Mr. Cheyne first introduced a couple of silk sutures high upon the surface of the liver, carrying them under the capsule of the liver for two inches, and then passed the ends through the surface of the diaphragm, and when these were tied the liver was held in place. In addition one or two vertical sutures were passed towards the lower margin of the liver, the ends brought out above and below the costal cartilages and tied. Lastly, the free edge of the liver was stitched to the peritoneum and the muscular walls of the abdomen along the greater part of its course.

The after treatment consists of confining the patient in bed for six weeks and applying a pair of Gallant corsets before she is allowed up. Enteroptosis is usually treated with the Gallant corsets, but many operations have been attempted with more or less success. The author thinks the best surgical measures, where no hepatoptosis exists, are shortening the gastro-hepatic omentum and suturing the abdominal wall so as to bring the recti muscles together.—*The Lancet*, April 7, 1906.

J. B. ELLIOTT, M. D.

RESULTS OF FACIO-HYPOGLOSSAL ANASTOMOSIS FOR FACIAL PALSY.—Alfred S. Taylor and L. Pierce Clark have treated six cases of facial palsy following mastoid operations by implanting the trunk of the facial nerve into the hypoglossal nerve. Briefly the operation consists in dividing the facial nerve at its exit from the stylo-mastoid foramen, exposing the hypoglossal nerve behind the internal jugular vein and above the level of the posterior belly of the digastric muscle, and, finally, in doing a lateral implantation of the distal portion of the facial nerve into a longitudinal slit in the hypoglossal. A very important step is to wrap the anastomosis in cargile membrane to prevent ingrowth of connective tissue.

The after treatment consists of the systematic use of massage and electricity, and with the first evidence of returning motor power systematic exercise of graded voluntary motions in the paralyzed muscles. This last is the most important single element in the after treatment. The results of the six operations were: 1. Mortality absent and shock very slight. 2. A well marked paralysis of the hypoglossal nerve was present in the three first cases, but this disappeared after six or ten weeks. 3. Each case healed by primary union. The scar was small and not very noticeable.

The remote effects were:

1. A moderate hemiatrophy of the tongue has persisted in the first three cases, though the power to move the tongue in all directions has returned.
2. Voluntary motion to a very satisfactory degree has returned in the first three cases. In the first case very little was expected on account of the unsatisfactory conditions found at operation, but the patient has made

such progress in twenty-five months that nearly complete return of power is to be expected ultimately.

Case 4, though completely paralyzed for twelve years and with badly atrophied muscles, yet showed beginning return of power around the chin and corner of the mouth at the end of five months, and this power is steadily, though slowly extending.

Case 6 shows distinct voluntary motion one year after operation.

An interval of one year between the onset of the paralysis and the operation should be long enough to show whether spontaneous healing will take place.—*Journal American Medical Association*, March 24, 1906.

J. B. ELLIOTT, M. D.

RHYTHMIC LATERAL DISPLACEMENT OF THE HEART AS A SIGN OF UNILATERAL PLEURITIC EXUDATE.—C. L. Green, in the *American Journal of the Medical Sciences*, of March, 1906, describes a rhythmic lateral movement of the heart which occurs in unilateral liquid pleural effusions. Such movement is most marked in medium-sized effusions. He states the heart approaches the affected side in inspiration, and moves outward in expiration. The extent of the movement varies, but often amounts to two inches. Deep breathing and forced expiration are essential to the success of the displacement, and to obtain this morphine must sometimes be administered. The displacement may be measured by several methods, namely, fluroscopic examination, auscultatory percussion, or in the case of right-sided effusions, by simple deep percussion of the free cardiac border, or in some instances by mere inspection of the apex beat. He concludes by saying that marked rhythmical movement has not been found in pneumonia, tuberculous infiltration of the lung, malignant disease of the pleura or lung, or in sub-diaphragmatic abscess.

G. MORRIS GOLDEN, M. D.

HEAD JERKING IN BASEDOW'S DISEASE.—A number of authors have recently published observations on a symptom of Basedow's disease, consisting in rhythmical jerks of the head, sometimes antero-posteriorly and at other times laterally. The explanation for this symptom, as given by the writer is as follows: The vertebral arteries describe two curves before entering the cranium through the occipital foramen. These curves under the influence of the wave of blood that passes the arteries at each systole, tend to straighten out and transmit an impulse from below upward to the occiput, very close to the fulcrum represented by the vertebral column. During each systole, therefore, the head is moved from behind forward. As regards the movement from left to right, the probable cause of this is a diminished pressure in the right carotid, owing to the greater development of the right thyroid to be observed in the cases in which lateral jerks occur. This asymmetrical development of one lobe is often noted in exophthalmic goitre. When the two factors exist together, there is an oscillation of the head from right to left, and from before backwards. The symptom in question is undoubtedly useful in the diagnosis of Basedow's disease. Baccardio, *New York Medical Journal*, March 3, 1906.

G. MORRIS GOLDEN, M. D.

PERIODIC AND CHRONIC VOMITING.—D. Roberts discusses the subject at length, and the difficulties that may attend the diagnosis of causation of chronic and periodic vomiting, and emphasizes the fact that a careful search of the entire body, and all its functions may be necessary. In closing he summarizes his deductions as follows: 1. Vomiting of a chronic type, following gradually developed gastralgia, from one-half to three hours after the ingestion of food, is attributable to peptic ulcer, gastric or duodenal. 2. Chronic vomiting that occurs from ten to fifteen minutes after food ingestion is attributable to a stenosis of the cardia, nervous abnormality, cerebral lesion (occasional rather than chronic), or to protracted acute gastritis. 3. Copious vomiting ten or more hours after food ingestion indicates a muscular insufficiency; frequent repetition indicates a permanent lesion in the nature of a mechanical interference with the exit of food. 4. Vomiting in the night is particularly liable to occur in cholelithiasis, periodic hypersecretion, muscular insufficiency, and nervous abnormality. 5. Vomiting attempts when the stomach is empty indicate a cause other than a gastric lesion, either a reflex cause, a toxæmia, a cerebral lesion, or a nervous abnormality. 6. Morning vomiting and retching indicate either a beginning of pregnancy, alcoholism, pharyngitis, nephritis, or a nervous abnormality. 7. Periodic vomiting of clear gastric juice of normal or supernormal acidity in any considerable amount indicates a secretory neurosis or an ulcerative lesion. 8. Vomiting as a sequel of headache, accompanied by severe nausea, but no gastric or abnormal symptoms, characterizes attacks of migraine; in a majority of cases eye-strain is the underlying cause. 9. Attacks of vomiting of sudden onset, with tinnitus, deafness, and vertigo, are attributable to disturbances of pressure in the internal or middle ear. 10. Periodic attacks of vomiting of sudden onset, associated with more or less severe gastric pain and nausea, retraction of the abdomen, obstinate constipation during but not preceding the attack, and freedom from abdominal tenderness, are suggestive of the spinal crises, idiopathic nervous vomiting, and lead poisoning. 11 Periodic attacks of vomiting after abdominal colic and constipation, with localized or general tympany, are suggestive of chronic intestinal stenosis.—*Medical Record*, February 24, 1906.

G. MORRIS GOLDEN, M. D.

TWO POSSIBLE CAUSES OF EMACIATION NOT GENERALLY RECOGNIZED.—R. C. Cabot calls attention to this subject, and points out the effect of arterial sclerosis, and that of pain and loss of sleep, associated with aneurism, in relation to emaciation. In a series of twenty cases of arterial sclerosis, not selected, there was an average loss of 29.5 pounds, while in a series of twenty-two cases of thoracic aneurism, in which pain and loss of sleep was present in all, and despite the fact that their appetite and digestion was good, exhibited an average loss of flesh of 29.4 pounds. He then calls attention to such factors as the effect of internal secretions, exercise and other forms of activity, heredity and psychic conditions, and sexual factors, in relation to the subject discussed. He concludes by summarizing as follows: Loss of weight (gradual or fairly rapid), is often observed as a part of the aging process in persons past middle life. This emaciation is often associated with arteriosclerosis, possibly as a re-

sult of it, possibly as the concomitant effect of some third (unknown) factor. The rapid gain in weight often seen in growing children and in the convalescence of wasting diseases is not directly a result of abundant food, and may occur even when the food supply is far below normal. The gain must be referred to an extraordinarily rapid cell production, due primarily to heightened growth energy in the cells themselves. That influences connected with the organs of sex may exert a controlling force on nutrition is strongly suggested by the changes in flesh and figure following parturition and the menopause. The importance of internal secretions in the maintenance of perversion of nutrition is exemplified in the emaciation of Graves's disease, the increased weight of the myxœdematous, and perhaps in the more local hypertrophies of acromegaly and Paget's disease. The possibly decisive influence of insomnia on weight is suggested by the rapid emaciation sometimes occurring in cases of aneurism when sleep is prevented by pain, though the appetite remains excellent.—*Journal of the American Medical Association*, March 17, 1906.

G. MORRIS GOLDEN, M. D.

GASTRIC CANCER.—William J. Mayo states that there is no medical side to cancer of the stomach, and reviews the literature, showing what enormous strides have been taken in gastric surgery of late years. He reviews the statistics of several leading surgeons as well as his own, and shows that not only in the direct mortality of the operation, but also in its later results, it compares favorably with the surgery of cancer of other parts of the body. The only way in which an early diagnosis can be made is by exploratory incision; but clinical symptoms, especially if associated with a history of old or recent ulceration, may arouse suspicion and justify exploration. In 140 of his cases of gastroenterostomy the mortality was 15 per cent., and the average prolongation of life, so far as known, was less than five months. The figures given by Kronlein and Mikulicz are even worse. The operation merely prolongs a chronic invalidism by a few hopeless, weary months. For cancerous obstruction of the cardiac orifice, however, gastrostomy is the only resource, and is frequently demanded by the patient. He has had 18 cases, with three deaths, a mortality of 16 per cent. The duration of life was about the same as after gastroenterostomy. Of explorations with discovery of hopeless gastric cancer, he had 72, with one death in the hospital. The average stay of such patients in the hospital is less than five days, the deep wounds being closed with catgut, and the strong aponeurotic structures braced with buried mattress sutures of linen, silk or silver. In conclusion, Mayo urges on the profession the merits of the radical operation in suitable cases of gastric cancer.—*Jour. A. M. A.*, April 7.

THE KNOWN MEDICAL VALUE OF RADIUM.—Metzenbaum after a careful study of medical literature and extended clinical experience in the use of radium has arrived at the following conclusions as to its utility in medical practice:

1. That lupus responds promptly to the action of radium, and that this result is obtained as readily as with the Finsen light or the X-rays, and that these results seem permanent.

2. That small epitheliomata without glandular involvement heal rapidly under the action of the radium rays.

The epitheliomata may be situated on the face, within the nasal cavity, mouth, pharynx, larynx, vagina, rectum, or bladder, provided the tubes of radium can be brought into intimate contact or close proximity to the diseased area.

Large epitheliomatous areas of the mucous membranes may not be influenced to any marked degree, probably because in large areas the disease is not only superficial but the deeper tissues are involved as well. Epitheliomata on the skin responds far more readily than those of the mucous membranes; this is probably because the skin is kept dry and is not irritated by moisture or friction of the parts. The healing of epithelioma under the action of the radium rays seems to be permanent.

3. The rodent ulcers about the face and head respond better to the action of radium than to any known agent excepting the X-rays, and the results are better than those usually obtained by surgical interference.

4. Deep-seated, malignant growths seem beyond the influence of the radium rays, and even when an incision is made into the growth and the tube of radium is inserted into its interior there is then only a histological change in that part of the growth surrounding the tube of radium, as is demonstrated by a microscopical study of the tissue. Even if the radium rays exerted any beneficial influence on truly malignant, deep-seated growths, the fact could not be used to any great advantage in these cases, for the local action would be so pronounced as to cause an ulceration of the skin before it could influence the growth beneath.

5. In certain cases of total blindness, possibly in which some of the fibres of the optic nerve still remain intact, a sensation of light may be noted when a tube of radium of high activity is placed in front of the eye or against the temporal region. But thus far radium has given no beneficial results in the treatment of blindness.

6. When tubes of radium are applied to old scars resulting from healed lupoid ulcers, it causes them to lose their rough and fibrous appearance and renders the area quite smooth and pliable, so it resembles more nearly the healthy tissue.

7. Radium cannot be used like the X-rays to obtain skiagraphs, for it requires at least twelve hours' exposure before the rays penetrate the hand, and then there is not as sharp a differentiation between the tissue as is shown by the X-rays. Again, from such a long time exposure the skin would be so irritated as to cause it to ulcerate.

8. The beneficial results obtained from radium have been equally good when using tubes of low activity, costing but a few dollars, as when using tubes of very high activity, costing several hundred dollars.

9. Up to the present time radium is to be classed with the Finsen light, X-rays, and surgery in the treatment of lupus, and with surgery and the X-rays in the treatment of rodent ulcer and small epitheliomata.

EYE PROBLEMS FOR THE GENERAL PRACTITIONER.—This subject is discussed by Richard Tiven in the *New York Medical Journal*, March 24th. There are two reasons why a general practitioner should be posted on diseases of the eye. First, because of the diagnostic value of certain ocular

symptoms in connection with some constitutional diseases. Second, because patients suffering from ocular diseases usually consult the general practitioner first, and he should be capable of recognizing the early signs of the usual disorders of the eye in order that he may insist upon a thorough examination and see to it that appropriate treatment is instituted before valuable time is lost. Tiven recapitulates his article as follows:

1. Ocular findings are of distinct diagnostic and prognostic value in systemic diseases. The clinical ocular manifestations observed in nephritis, diabetes, locomotor ataxia, syphilis, and rheumatism amply warrant this conclusion.

2. Foreign bodies in the cornea are frequently the source of serious disease of the eye. Infection may be introduced, and ulcer with grave consequences develop. Antiseptic measures are to be strictly observed in their removal.

3. Iritis, conjunctivitis, and scleritis may be confused in diagnosis. Care in distinguishing the distinct clinical manifestations of each will prevent the error.

4. Glaucoma may be diagnosed as sick headache, persistent neuralgia, erysipelas, influenza, or toothache. In all such cases the tension of the eyeball is the correct guide.

5. The use of cocaine and atropine is not free from danger. Toxic symptoms may be produced. Contraindications for use of atropine are distinct, and tension should previously be estimated.

6. Squint in children should be treated early. The usual order of treatment followed is: A. Correction of refractive errors. B. Training of fusion sense. C. Surgical measures. Errors of refraction underlie the majority of cases, and proper fitting of glasses may be all that is required.

LEPROSY IN CUBA.—At the present time there are supposed to be about 3,000 cases of leprosy in Cuba. Victims of the disease are obliged to enter leprosy hospitals, and are virtually prisoners for the rest of their lives. The hospital in Havana contains at present about 80 male and 40 female patients of various ages. Most of these cases are Cubans. There are also a few Spaniards and Chinese. All present a rather melancholy spectacle. The disease lasts, as a rule, from ten to fifteen years, rarely twenty years. Treatment with chaulmoogra oil has not been productive of good results, and the treatment with the bark of mangle rajo, from which results were expected, has been abandoned.—*Journal des Maladies cutan. et syphilit.*

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY JOHN HUTCHINSON, M. D.

WHITHER ARE WE DRIFTING? *Editor Medical Advance*: A new and wonderful discovery made by one of our profound thinkers, occupying a chair of practice in an eastern homœopathic college:

That all cases of malaria can be cured by quinine.

All cases of anemia by muriate of iron in good old fashion doses.

All cases of syphilis by mercury. . . .

I consider this not only the greatest discovery ever made, but I feel tempted to go and strive to awake Samuel Hahnemann from his sleep to let him in on the ground floor of this medical wonder. Had he and his true followers only known this, what hours of toil might have been saved in seeking the similimum. . . . Alonzo Eugene Austin, M. D., 673 Madison Ave., New York, in *Medical Advance*.

[The above incongruity suggests the origin of a serious evil complained of in the following:]

HEAR! HEAR!—"As a matter of fact, the young men coming from the colleges to-day, care nothing about materia medica, the bulk of them. I want to repeat it, gentlemen. The young men coming from the colleges to-day care nothing about materia medica. All they desire, the bulk of them, is a good supply of the coal-tar products, chloral and epsom salts, and a whole lot of other things that make them incompetent as house officers. When we get a young man to-day, we have to watch him and follow him about to find out what he is going to prescribe for constipation and the other conditions that he has to treat. It takes the first three months to cull out the things he has learned from his allopathic teaching in homœopathic colleges—allopathic teaching, I say, poorly done—and to get him so that you can go away for a day and have your patients cared for in a proper manner."

These pungent remarks by that noted surgeon Dr. J. M. Lee, (Transaction of N. Y. State Hom. Med. Society, 1905) are peculiarly and excoriatingly interesting.—Dr. Shedd, in *N. A. J. H.*

OPTIC NEURITIS FROM QUININE.—The writer has in his clinic a man who has taken on his own initiative nine grains of quinine daily for one year, and during the previous year five grains every other day. In each eye there is a marked optic neuritis. There is no specific history, the kidneys are healthy, and there exists no other apparent cause for the neuritis. The

writer can not find any other such case reported. Quinine amblyopia and contracted fields are freely reported. H., in *H. E., E. and T. Journal*.

THE CURE OF TUBERCULOSIS.—It is a remarkable fact that pulmonary tuberculosis is the most curable of all chronic diseases. In fact, there is never a death from pulmonary tuberculosis. In a case of the kind that ends fatally, the issue is always due to secondary infection. The post-mortem table furnishes innumerable instances of healed tubercular lesions in the lungs of those who have died of some other affection, and yet, notwithstanding these facts, the "great white plague," as it is called, is responsible for a greater number of deaths than any other malady to which the human race is subject. Hence, we have the paradox that the most curable of all chronic diseases is the most destructive to human life.

But this very fact, so stated, bears with it the most important lesson that the science of medicine has ever conveyed. It prompts to active effort in its curable stage, so that it may not go on to the stage of secondary infection, in which, in so many cases, it becomes incurable. It is only within the past few years that the whole world, seemingly, has awakened to this fact. What Brehmer taught fifty years ago has only now become generally accepted, and is only now being generally acted upon.

The cure of pulmonary phthisis is no longer a question of medical science. It is a question of dollars and cents. The prognosis may be expressed in this wise:—

In the wealthy classes—favorable prognosis. In those of moderate means—doubtful prognosis. In the indigent poor—unfavorable prognosis.—Ch. Gatchell, M. D., in *The Clinique*.

[It may be mentioned in this connection that some of the indispensable agents in the cure of patients afflicted with tuberculosis are the homœopathic remedies. Among these prominently indicated in numerous cases are aconite, belladonna, rumex, hyoscyamus, spongia, sanguinaria nit., silica, lachesis, psorinum, calcareas, lycopodium, kalis, iodides. But the careful selection of potency is also most important.]

APOCYNUM CANNABINUM.—(Discussion of the N. Y. Homœopathic Materia Medica Society). As in apis a key note of apocynum is edema. The edema is usually general, while in apis it may be local.

The patients requiring it are apt to have abdominal dropsy with diarrhea. They may have albumin in the urine, but when the kidneys are affected, apis is more apt to be the useful drug. The kidney cases requiring apocynum are more apt to be secondary than idiopathic. It acts on the gastric mucous membrane, giving rise to thirst and vomiting. It has proved palliative in heart cases accompanied with thirst, vomiting and irritability of the stomach. It differs from apis in that there is thirst, chilliness and desire for warmth. In kidney conditions with edema, the group of symptoms indicating apocynum are: gastric irritability and vomiting; thirst; chilliness with desire for heat.

In most of the reports, the tincture was used, but results were also obtained from the one thousandth.

SPECIALTIES IN PRACTICE.—By John Albert Burnett, M. D., Cecil, Ark. *Eclectic Medical Journal*.—When the pathology of a disease is not under-

stood it is treated only empirically, and can not be otherwise. No matter what the homœopaths say about totality of symptoms, it is purely empirical. The regular physicians specialize pathology to a great extent; the eclectics specialize *materia medica*; the homœopaths specialize symptomatology and *materia medica*, and the physio-medicalist knows a great deal about the action of non-toxic agents. The homœopaths use drugs only for their dynamic effect, and their symptomatology is, to my mind, practically worthless. In fact when a drug is used in regular eclectic or physio-medical doses on homœopathic indications (symptomatology), it will aggravate the condition—a fact which all homœopathic physicians know. Often a homœopath finds that a low potency, where the drug is indicated, will aggravate the condition, when they claim a high potency will cure it.

I have fooled with homœopathic potencies enough to believe that this is true. But it looks like trusting to nature when the potency goes up to M. or MM. At least they can leave me out in this just at present.

[The doctor is to be congratulated upon having demonstrated some things homœopathic. Let him be admonished, however, not to fool with the M. or MM. potencies until he is really acquainted with them. Sad results may follow a belief that the gun isn't loaded.]

LYCOPodium.—By W. H. Freeman, M. D., in the *N. A. Journal of H.*—This remedy forms one of the leading trio of antipsorics. It is also one of the three or four leading remedies in acute diseases, ranking with bryonia, nux and belladonna in frequency of indication. In very serious acute diseases, it takes second rank for none other in the *materia medica*.

It acts deeply on all the vital organs, producing symptoms simulating organic disease in all its stages. It gets at the fundamental cause of the disease and will cure when some other seemingly well indicated but less deeply acting drug will fail or only palliate.

It is often necessary in order to complete the cure begun by some other antipsoric. In chronic complaints it acts better following some other remedy than when given at the beginning of treatment.

It acts especially well after calcaria, lachesis, and sulphur.

It ranks with belladonna and rhus for the acute ailments arising in the calcaria type of patient, the difference being that while belladonna or rhus will most often cover the acute miasms, lycopodium is more often necessary for the acute manifestations of psora in such patients.

We may find cerebral symptoms of equal violence and great similarity under belladonna and lycopodium but the general symptoms will differentiate them.

[It is always worth while to have attention called to the stupendous sphere of lycopodium, the remedy introduced into medicine by Hahnemann himself, and by him demonstrated of marked character and power. It is one of the great remedies illustrating perfectly two at least of the cardinal truths of the law of similars—the absolute cure of conditions the symptoms of which it will produce, and that cure accomplished by the infinitesimal preparation of the drug. It is extremely doubtful, in the light of verified literature and records of its therapy, whether certain chronic maladies can be *cured* without lycopodium.]

THE LEGAL STATUS OF THE OPERATING SURGEON.—A case against a surgeon of this city was recently brought to trial, in which the court passed upon the question as to when the responsibility of the operating surgeon begins and terminates, as far as liability for damages is concerned.

The suit was for \$25,000 damages for an alleged burn from a hot water bag, which, it was claimed, the operator's nurse placed in the patient's bed before she was returned to it from the operating table, and that it was not removed or properly covered. It was not claimed that the surgeon ordered the bag placed in the bed, but that the nurse which he employed to assist him was incompetent and negligent.

On the part of the defendant it was claimed that the patient was in charge of the family physician absolutely, *except during the time she was on the operating table*, and that the operating room nurse could not be held responsible for any accident which occurred after the patient was removed from the table, the operation being then completed.

The court accepted this view and ordered the jury to return a verdict for the defendant.—*Medical Review of Reviews*, April 25, 1906.

FOREIGN LITERATURE.

CONDUCTED BY E. FORNIAS, M. D.

OBSTETRICS.—Dr. Bar, of Paris, delivered his first lecture on the 20th of January, at the Maternity of Saint Antoine Hospital, the subject being, "Claudication from the Obstetrical Point of View." After a rapid history of this subject he commenced by stating that to understand how a pelvis can become deformed under the action of claudication, it is indispensable to know the laws of its formation. The pelvis of the new-born, he said, is very peculiar; according to some the antero-posterior diameter of the superior strait is notably larger than the transverse, while for others, principally Dr. Brindeau, the superior strait of the fetal pelvis is sensibly circular. If we now examine the pelvis of an adult female, we find that the transverse diameters surpass the antero-posterior in the superior strait (Diameters, antero-posterior, 11 c.m.; transverse 13½ c.m.). This difference between the adult and new-born pelvis is due to several causes. First of all the development of the bones, and this by virtue of an atavic force; any circumstance which hinders this transformation will be a cause of pelvic deformity. The second cause depends on the development of the genital apparatus. All is in harmony in the human body. What is the pelvis but an organ of protection? The pelvis is to the genital apparatus what the cranium is to the encephalon. There is a relative proportion between the development of the protected and protecting organs. One meets with females in whom the uterus, vagina, and ovaries are not developed, and where the pelvis only develops transversely. It always remains an adolescent pelvis; this is the hermaphrodite. The ancient statuary knew it well when he modelled his hermaphrodite with such a pelvis. Inversely, woman

can have two uteri, when their hips will be larger; the protecting organ then following the motion given by the protected organ. We have taken here the two extremes as examples. In our daily practice we find a great number of females where the pelvis is generally contracted, stigmata of rickets. In such cases we at once would anticipate a hard labor, for the simple reason that the pelvis has little amplitude and also because the genital organs would present an extreme narrowness. The third cause is dependent on the fact that the pelvis is yet the attachment of the lower limbs to the trunk. If the woman is standing, the vertebral column transmits its pressure on the femur by the innominate lines and its two branches would deviate indefinitely if the two bands of the pubis would not hinder too great a separation of the lateral parts. What will happen on walking? Let us suppose the pelvis enlarged in its antero-posterior sense, the bands will resist, but allowing a certain degree of separation, until gradually the transverse diameters become fixed. But if the woman is sitting, she rests upon the two ischia and the pressure produced by the vertebral column will follow the wings, and descend to gain the ischia, which will have then a tendency to separate; but this separation is arrested by the two ligaments which go from one ischium to the other, and which instead of being parallel with the superior ligaments, they take an oblique direction to become the ischio-pelvic branches. These branches or prolongations allow a certain amount of separation and while the child grows, the pelvis takes the transverse direction. These are the factors which govern the genesis of pelvic deformities. The development of the parts will interfere with claudication whenever the cause of this, should act on the bones of the pelvis.

On the other hand, the action of the genital development will remain without effect. But the action of counter-pressures will prove operative. This action will be distinctly felt and we can well assert that all lameness affecting the pelvis proper may hinder the development of the bones; that all the causes of lameness situated low have the greatest chance to leave the bones unaffected; that all those situated higher may arrest the development of the ilium. To this we may still add that the greater the lameness the more will pressure and counter-pressure intervene, and that the earlier claudication commences, the more injurious will be its action on the pelvis, for then the bones are more yielding.

A CASE OF VESICAL DISTENSION IN THE FETUS was presented by Dr. Therbinet before the Obstetrical Society of Paris. The distension was due to the absence of the urethra, the intestine was inoculated to the bladder. On the other hand, the external genital organs existed. Another fetus, about four months old, presented also a distended bladder. Dr. Brindeau thinks that in cases of this kind there may exist oligamny.

PUERPERAL INFECTION.—Dr. R. Petit experimented with the artificial production of polynucleose by means of the serum of an overheated horse in 11 cases of puerperal infection. After emptying the womb, a tampon, soaked with the serum and containing the serum in powder, was inserted. In the escaping, sticky fluid, one could see a large number of polynucleoli

holding the microbes in their protoplasm. This serum is an excellent medium for cellular life, but a bad one of culture for the germs.

E. FORNIAS, M. D.

THE TREATMENT OF GASTRIC HYPERACIDITY AND HYPERSECRETION.—The principal and typical form of this gastric affection is nervous hyperacidity. Here an albuminoid diet, although apparently beneficial, has no permanent favorable effect upon the condition. The tendency to hyperacidity may, on the other hand, be gradually controlled by a vegetable diet. Great care is, however, necessary in the selection and preparation of the cereals, vegetables, and fruits; also for the avoidance of bloating and indigestible articles of food. The vegetable proteids are best, together with a moderate use of meat. Of the fats, good sweet butter, cream (eggs), and, in some cases, olive oil by the spoonful, are especially recommended. Frequent small meals are advisable, especially late at night and early in the morning. It is useful to wash the stomach, especially in the evening, in order to secure a good night's rest. After this procedure, some alkaline remedy should be given internally. In many cases a powder of belladonna, bismuth, magnesia, and sodium bicarbonate proves valuable. The introduction of large amounts of fluid is contraindicated.—*Albu. Therapie der Gegenwart*, 4, 1905.

ACTION OF IODINE AND IODIDES ON THE CIRCULATION.—Iodine and Iodides on the one hand, and thyroidin and iodo-albumin on the other, cause opposite effects on the heart and the extra cardiac nervous apparatus. The former cause hypertension and the latter hypotension when administered in medicinal doses. In toxic doses, however, they both cause hypotension by their depressent action on the myocardium and by paralysis of the nervous system. Consequently, iodides should not in practice be considered as genuine cardiac drugs, for their action on the circulation when administered in therapeutic doses is only secondary and subordinate to their action on the lymphatic system and on the blood. The instability of the iodo-albumins and the thyroid preparations is a drawback to their utilization in practice, their employment should be subjected to closer scrutiny than it is at present. Although their effects on the circulation are greatly diminished with age, their toxic properties are increased, and their bad effects on the nervous system and on nutrition have caused many accidents, in most cases attributed to the disease itself.—Dr. Pouchet.

THE HAHNEMANNIAN MONTHLY.

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CLINICAL METHODS OF EXAMINATION.

CLINICAL EXAMINATION AND CASE-TAKING IN DISEASES OF CHILDREN.

BY

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IN the investigation of the diseases of children the first step is the recording of a concise, accurate history. This history alone may suggest the diagnosis, prognosis and treatment; it will at least point out the direction to be followed in ascertaining these facts. The history in many instances will reveal the etiological factor; it will picture the evolution of the clinical manifestations, and it will interpret the meaning of physical signs. The relationship of the history to physical signs is a most vital one. It should ever be born in mind that the data obtained by the art of physical diagnosis relate strictly to physical conditions, and shed no light upon the pathologic nature of these physical findings. Take, for example, the physical evidences of consolidation of lung structure. Not knowing the patient's past history, the duration of the illness, the mode of onset and subsequent course, the presence of sputum and its character—who can form an accurate estimate of the pathological changes within the chest that have produced these signs of consolidation? Here the personal history, coupled with our knowledge of the natural history of

disease, sheds the necessary additional light upon the case, and the conclusion is then as a rule accurate and not difficult to reach. For example: In pneumonia consolidation develops rapidly in conjunction with a fever of abrupt onset. In the course of a week or two resolution is well established and the temperature has fallen to normal. Should resolution be delayed and the history point to a more gradual onset with a preceding period of loss of flesh, the presumption is that we are dealing with a tuberculous condition. This presumption is all the more justifiable if an upper lobe be involved and there is a tuberculous family history. On the other hand, if we detect *apparent* signs of pulmonary solidification over an extensive area posteriorly, persisting after an attack of pneumonia—in other words, a “meta-pneumonic process”—in a previously healthy child with a negative family history as to tuberculosis, we are justified in aspirating the chest for fluid.

It is hardly necessary to mention that the records should be made in writing and kept either upon cards—the card-index system—or in a suitable record book. Personally I prefer the card system, and in my hospital work we have been using a card with printed headings of the principal subjects of inquiry that are to be noted. This is not essential, but it is an aid to the performance of accurate work to have a definite plan upon which to proceed. The excellent plan of general and special interrogation elaborated by Bartlett (*The Principles of Diagnosis*, p. 5) may be accepted as a basis for all clinical work, although in the study of diseases of children it is necessary to follow distinctive lines of inquiry, and employ clinical methods that have been developed especially for this branch of clinical medicine or so modified as to conform to its needs.

To be complete, a history should first of all give the age, sex, family history, previous history (including mode of birth, mode of feeding, rate of physical and mental development and previous illnesses), the environment and the particulars concerning the present illness.

Schematically this may be represented as follows:

History: Health of father (If dead, give cause of death).

Health of mother (if dead, give cause of death).

Health of other children (if dead, give cause of death).

Mode of birth.

Food.

Dentition; walking; talking.
Previous illnesses.
Present environment.
Present illness.

The *age* and *sex* must always be taken into consideration, especially the former, for each period of childhood has a group of diseases associated more or less exclusively with it; as, for example, the diseases of the new-born; the bowel affections of the dentition period; the broncho-pneumonia of infancy, and the contagious diseases of later childhood. As to sex, it may be said that chlorosis and chorea occur more frequently in girls than in boys, while the latter are more often attacked with pneumonia. Sex is of less importance, however, than age. The nativity may also throw some light upon the diagnosis, some races being more susceptible or more frequently exposed to certain diseases than others.

The *family history* will enlighten us as to the presence of an hereditary disease or an inherited predisposition. *Apropos* of tuberculosis, we should not only inquire into the health of the parents and relatives, but should also find out whether or not the child has been exposed to strangers suffering from the disease or is living in a house previously occupied by a consumptive. I have in a number of instances seen children with a spotless family history acquire tuberculosis from strangers or distant relatives in this manner. The environment is therefore always to be taken into consideration.

A history of syphilis can at times be obtained from the parents, but often they will not only deny having had the disease, but even evade skilful cross-examination. A history of miscarriages and stillborn children previous to the birth of the present child is strong presumptive evidence of syphilis.

Rheumatic parents beget children that inherit a tendency to rheumatic affections. It is not uncommon to find in our cases of chorea, endocarditis, growing pains, certain dermatoses, etc., a rheumatic family history. The same is true of gout. A neuropathic family history is also important to note.

The number and health of the other children should be ascertained. How many have died, and of what diseases? Are any ill at the present time? Have the children been born in close succession?

The *mode of birth* is important from the neurological stand-

point, a paralytic affection being sometimes accounted for in this way. (Erb's brachial palsy; pial hemorrhage from protracted or instrumental labor.)

The mode of feeding. This is of prime importance, as improper food causes more sickness in infancy than any other etiological factor. When the child is artificially fed the danger of infection must be born in mind. (Cholera infantum, ileocolitis, tuberculosis, etc.) Furthermore, the nutritional disturbances, like marasmus, rickets and scurvy, are directly traceable to improper feeding. We must not forget, however, that the mother's milk may be insufficiently nourishing, especially in cases of protracted nursing. Under these circumstances rickets and malnutrition are just as likely to develop as if the child were artificially fed.

Note the time at which the *teeth* made their appearance, and whether dentition progressed steadily or with interruptions; also note the time of *walking* and *talking*. Dentition, the time when the child began to walk and the size of the fontanel are indices of the physical development of the child, while the time of talking is one of the most important gauges of the mental development. Earlier signs are: When was the child first able to hold up its head unsupported? Sit up? Laugh? Play with toys? Support the weight of the body upon the legs and creep?

Previous illnesses. Has the child had the various contagious diseases? Name them to the mother. As most of them occur but once in a life-time, we can eliminate those the child has already had. Vaccination should not be forgotten. Beside the immunity conferred by the infectious diseases, we must also remember that they may be followed by sequelæ, or may leave a predisposition to other diseases. For example, measles or whooping cough may predispose a child to tuberculosis. Scarlet fever is often followed by nephritis, or it may leave the child with a chronic suppurative otitis media, and the latter in turn may be the cause of some obscure intracranial condition like cerebral abscess or sinus thrombosis. Many other instances might be cited.

Environment. Aside from offering a source of infection, the environment may affect the child's constitution to a marked degree. The squalid overcrowded dwellings of the poor in the larger cities are responsible for anemia, rickets and often

tuberculous infection. Rickets is comparatively rare in the country districts. Overwork at school and an exacting teacher may be the etiologic factor in chorea. Again, many vicious habits are directly traceable to environment and associations.

Present illness. The interrogations regarding the present illness should be divided into the following sub-headings: Is the disease acute or chronic? What was the state of the child's health previous to the appearance of the first symptoms of the present illness? Were there any prodromata? Was the onset abrupt or gradual? How many days has the child been ill? If there is fever, when was it first detected, and has it been continuous, remitting or intermitting? What other symptoms have been noticed—vomiting, diarrhoea, constipation, cough, pain?

If pain is present, to what locality is it referred? Is it continuous, intermitting, worse from motion? Has the child complained of sore throat?

Having in this manner recorded the general characteristics of the case, our next step will be to investigate the various organs and systems with the object of arriving at a final diagnosis. As was said above, the history alone frequently develops sufficient evidence for a diagnosis; nevertheless the diagnosis is not complete unless the verbal examination of the patient be supplemented by a thorough physical examination. It will not be out of place here to offer a few remarks concerning the source of the data that have been reviewed above. They must, as a rule, be obtained from the mother or nurse, or whomever has been most closely associated with the child and knows its individual peculiarities best. But we must make allowances for faulty observation, exaggeration of symptoms and ignorance. Nevertheless, a mother's instinct or a faithful nurse's apprehensions must not be brushed aside too rudely. I have seen mothers make a diagnosis or foretell a prognosis, on suspicion, at a time when the physician himself could not reach a definite conclusion.

The following *special observations* and interrogations should be made after the general examination has been completed:

Inspection. Note the diathesis, apparent age, state of the nutrition and physical development. In order that the child may be satisfactorily inspected all clothing should be removed.

The color of the skin will suggest the presence or absence of anemia. Skin eruptions should be looked for, and, if present, their distribution, color, outline and physical characteristics noted. Always inquire where the rash first made its appearance, as this is a most important point in the differential diagnosis of the eruptive fevers. Cyanosis and jaundice are readily detected.

The facial expression, the position assumed, the presence of a deformity, inability to use one or more extremities (palsies), relative size of the head, chest and abdomen—these are all points to be borne in mind, and not carelessly overlooked. While we are not dealing in this paper with the subject of diagnosis, still history-taking is so closely associated with diagnosis that it is impossible to speak of the one without hinting at the other. In this connection it will be interesting to recall how Kernig's sign of meningitis was discovered. Kernig observed that in children recovering from meningitis it was impossible for him to obtain the knee-jerk when they sat on the edge of the bed with the legs flexed as they naturally would be in this position. This condition he found to be due to a spastic contracture of the ham-string muscles. On assuming the dorsal decubitus the contracture disappeared, but reappeared on flexing the thigh upon the abdomen. Later he was able to confirm his suspicion that this contracture was a reliable and early diagnostic sign of meningitis.

The *head*. Note its relative size and shape (microcephalus, hydrocephalus, rickets). Note whether the anterior fontanel is still open; if so, what is its size?

The *chest*. Note the presence of any deformities (rickets, scoliosis, kyphosis, empyema, emphysema.) Observe whether the respirations are normal or restricted (unilateral, abdominal). The spine should also be examined as to its flexibility and for the presence of tenderness.

Limbs and joints. Has the child had growing pains? Note whether the joints are freely movable, painful or enlarged. Is there any evidence of atrophy or spasticity?

An attempt should be made to elicit the *knee-jerk* the *ankle-clonus*, *Kernig's sign* and *Babinski's sign*.

The character of the *cry* should be recorded.

The *pulse*, *temperature* and *respiration* should be studied, not only as to their individual rate and character, but also as

to their relations to each other. Is the pulse-rate or the respiratory rate increased in a normal ratio to the degree of fever present? Is the pulse relatively slow or rapid as compared with the fever?

In disease of the *gastro-intestinal tract* the following special interrogations are to be instituted:

Is the *appetite* excessive or diminished? Does the infant cry before the next feeding? Is the appetite perverted? (Eating sand, chalk, etc., in older children). Does the child have colic?

If there is vomiting, does it occur shortly after nursing, between nursings or only at long intervals? What is the quantity, character and odor of the vomitus? Is the vomiting projectile?

If there is *diarrhœa*, note the number of stools in twenty-four hours; their size, consistency, color and odor. Do they contain curds, mucus, blood or pus? Are they watery or frothy? Is much gas passed with them? Are they painless? Is there much straining? Note whether the mucus is free or intimately admixed with fecal matter. Is it bile-stained or blood-stained?

Constipation. Are the stools large and dry, or are they normal in appearance? Has there been blood? Is defecation painful? Are vomiting and abdominal distension present?

The special investigation of *gastric disturbances* will necessitate an *analysis of the gastric contents*. Milk cannot be used as a test-meal, owing to its affinity for hydrochloric acid. Barley water or a broth made with barley or rice (strained) should therefore be prepared for this purpose. As a rule, the meal should be withdrawn three-quarters of an hour after its administration, as otherwise we will probably find the stomach empty. A soft rubber catheter with a piece of glass tubing inserted into one end will answer the purpose of a stomach-tube. Having obtained the specimen, note its general appearance, the presence of curds from previous feedings, mucus, blood. The odor may suggest the presence of butyric acid.

Filter the sample, and if the filtrate gives an acid reaction with litmus make the following tests:

Free hydrochloric acid. Add to a measured portion of the filtrate a drop of a one per cent. alcoholic solution of dimethylamidoazobenzol, and titrate the mixture with deci-normal

sodium hydroxide solution until the color-change from red to yellow indicates the end of the reaction.

Combined hydrochloric acid, acid salts and organic acids may be conveniently estimated together in terms of hydrochloric acid. This is accomplished by adding to the sample used in the above test a drop or two of an alcoholic solution of phenolphthalein and continuing the titration with the decinormal alkali until the solution assumes a faint pink tint.

Total acidity. This is determined by adding together the results of the tests for free and combined acid. The analysis is simplified and facilitated by making use of the author's acidometer. (See HAHNEMANNIAN MONTHLY, May, 1903.)

Lactic acid. This acid may be tested for by adding a little of the filtered gastric fluid to a few cubic centimeters of Uffelmann's reagent. (The reagent must be freshly prepared for each test. It is made by adding one drop of an aqueous solution of ferric chloride to five cc. of a one per cent. phenol solution.) The amethyst-blue color of the reagent is changed to a canary yellow in the presence of lactic acid. Hydrochloric acid may decolorize the solution, but it does not produce the characteristic yellow color.

Pepsin. The pepsin strength may be estimated by observing the rate of the digestive action of the gastric fluid upon coagulated egg albumen cut in small cubes. A better way, however, is to determine the presence of peptone, since this proteid can be found only when pepsin is present and active. It may be tested for either by precipitating with picric acid (after boiling to remove albumen), or by the Biuret test, which gives a rose-red color.

The examination of the stools. A specimen of the feces is readily obtained for examination by inserting a piece of glass tubing, with a smooth rounded end, into the rectum. Mix a small portion of the sample with normal salt solution and examine under the microscope. This will show the state of the digestion, the presence of parasites or their ova, pus, blood, mucus, fat globules, Nothnagle's corpuscles (proteid remnants) and Charcot-Leyden crystals.

Stain another portion with Lugol's aqueous iodine solution. If undigested starch be present the granules will appear blue. Erythrodextrin stains red, while oleic, stearic and palmitic acids take on a yellow color.

Milk curds do not consist of pure casein, but of a casein stroma in which fat, various salts and bacteria are embedded. If an excess of fat is suspected, treat a portion of the stool with ether, and note its solubility.

Chemical examination. Test the reaction of the stool with litmus. An alkaline reaction denotes proteid putrefaction. High acidity is due to an excessive production of the lower fatty acids by carbohydrate fermentation (acetic, propionic, butyric, lactic acids).

Test for lactic acid by extracting the feces with ether, filtering and testing the filtrate with Uffelmann's reagent. (See above.)

Acetic acid may be detected by extracting the feces with water, filtering and adding a few drops of concentrated sulphuric acid and a little alcohol. On warming ethyl acetate will be formed and may be detected by its characteristic ethereal odor.

Circulatory System. Was the infant a "blue baby" at birth? Did cyanosis persist during infancy? Has the child been subject to attacks of sore throat? Growing pains? The various acute infectious diseases?

Other symptoms should be recorded exactly as in the case of adults. This includes the various subjective sensations, the presence of signs of venous distension and ruptured compensation and the physical signs. In recording the physical signs we must bear in mind the relatively larger size and more horizontal position of the heart in childhood. Also the normal accentuation of the pulmonary second sound; the frequency of accidental (cardio-pulmonary and functional anemic) murmurs, etc.

The Blood. Family history of bleeders? Has there been a hemorrhage? Is the child pale in appearance? Has the child had epistaxis, shortness of breath, palpitation, swelling of the ankles? Is there enlargement of the spleen, liver and lymphatics? When such symptoms are present, a blood examination should be made (percentage of hemoglobin, number of red and white corpuscles per cu. m. of blood, differential count of leucocytes, presence of parasite of malaria.)

Respiratory System. If the symptoms point to an affection of the respiratory tract the family history is very important. Note especially if the child has any pathological conditions of

the nose and throat (polypi, adenoids, hypertrophied tonsils). Are there any tuberculous glands in the neck?

Cough. Is it tight, paroxysmal, suffocative and followed by vomiting? Is the cough painful? Does the child prefer to *lie* upon any one side? Must it be *propped up* in bed?

The Throat. The throat of every child should be examined in any acute illness. In doubtful cases a culture should be made by swabbing the fauces and inoculating a culture tube of Loeffler's blood serum. Diphtheria bacilli grow more rapidly than the other organisms usually found in the throat and at the end of from eight to twelve hours a cover-glass preparation may be made and stained with Neisser's stain. If diphtheria bacilli are present they can be readily identified. With this stain the bacillus appears stained brown, while the granular bodies within the bacillus take on a blue color.

The Urinary System. Is the urine diminished in amount? What is the color and odor? Is there enuresis? (Child must be past two years old before enuresis can be said to exist.) Has the child had dropsy? Convulsions? Note if the child has had scarlatina, influenza, prolonged suppuration. If a satisfactory specimen of urine for chemical examination cannot be obtained by the usually employed means the child should be catheterized.

I consider testing for the presence of acetone and diacetic acid, most important in pediatric practice. These products of abnormal proteid metabolism should be looked for especially in atypical febrile conditions and in obscure nervous disturbances.

The Nervous System. A neuropathic family history and parental syphilis should be inquired into. The mode of birth; condition immediately after birth (asphyxia, convulsions, unconsciousness). Was the child perfectly normal prior to the development of symptoms?

Convulsions. Did the child have convulsions in infancy? Did it show signs of rickets? Have the convulsions continued uninterruptedly since infancy? Has there been a traumatism? Has the child ever been paralyzed?

Paralysis. Determine whether present since birth. If acquired, did the paralysis develop suddenly or gradually? Was there a convulsion or loss of consciousness at the time of onset? Is it flaccid or spastic? What is its distribution? Did

it follow upon some acute disease? (After diphtheria, neuritis; after whooping cough, hemorrhage.)

The reflexes have already been referred to above.

Meningitis. Were there prodromata? Was the attack preceded by otitis media or some acute infectious disease? If retraction of the head is present, how soon after the onset of the first symptoms did it develop?

Note the state of the pupils, cranial nerve involvement, spinal nerve involvement, Kernig's sign. As a means of differential diagnosis, or in order to confirm the diagnosis in a doubtful case perform lumbar puncture.

CONCERNING SOME OF THE THERAPEUTIC USES OF ATROPIA.

BY

CLARENCE BARTLETT, M. D., PHILADELPHIA.

(Read before the Homœopathic Practitioners' Society of Reading, March 6, 1906.)

IN our anxiety to attain ideal results, we are too apt to resort to the use of new drugs to the neglect of others which have been known for years. In so doing, those with the most experience believe that we are doing our art an injustice. Atropia, it is true, is not one of the drugs commonly neglected. Nevertheless, I believe from personal experience with it, that we do not resort to it as frequently as occasions demand. It was for this reason that I selected it as the topic for my remarks this evening.

The physiological action of atropia has been well studied by many reliable observers. Thus has been demonstrated that in many particulars the drug is capable of producing directly opposite actions according to the quantity of it administered. The time at our disposal this evening will not permit of even a casual review of the experiments that have been made. I shall therefore begin at once my presentation of the true subject matter of this paper.

First a word as to the dosage of atropia. Concerning this matter, observation has taught me that physicians have very inadequate ideas as to the amount of the drug required to secure

proper results. I know of one instance in which one one-hundredth of a grain every two hours was advised. In another case in which the drug was used as a circulatory stimulant, in doses of one one-hundred and twentieth every three hours, it maintained a delirium with twitching of tendons which continued until the atropia was discontinued—a period of over three weeks. When the circumstances of the case are such as to call for a single dose only, the quantity may be made very large without any ill effects. Even the twelfth of a grain has thus been given hypodermically, and it is said without producing drug symptoms. Although the authorities for this statement are many, I feel a doubt as to its accuracy, because the conditions calling for such treatment are of so serious a character that the physician's pleasure in the presence of convalescence is apt to lead him to overlook such comparative trifles as temporary drug-symptoms. In cases in which repetition of doses is necessary to effect a cure, the required amount is decidedly less than above stated. Ordinarily, the two-hundredth of a grain may be regarded as the standard for this purpose, and its maximum repetition but three times daily. A very large number of patients cannot tolerate this small dose, owing to dryness of the mouth and throat and paralysis of accommodation and dilatation of the pupils. Under such circumstances, the dose should be reduced to one four-hundredth of a grain three or four times daily, and I have met with cases in which even such small quantities cannot be tolerated more frequently than twice daily. These physiological effects of atropia constitute at times a serious bar to its administration. For example, one of my patients suffering with gastric ulcer and hyperchlorhydria cannot take the minimum dose above mentioned. While the four-hundredth of a grain brings prompt relief to the pain, it produces a dryness of the mouth and disturbance of vision demanding the discontinuance of the medicine. Some little time back, reading an article praising the virtues of eumydrin—a new atropia preparation—and claiming for it the freedom of unpleasant after-effects, I made a trial of the drug. It was the same old story without variations—the dryness of the mouth from eumydrin was as great as that produced by the atropia. Exceptionally, one encounters patients who exhibit a remarkable tolerance of atropia. For example, one of my

patients, a man aged 76 years, has taken the two-hundredth of a grain three times daily for over four years. It was prescribed for severe paroxysmal pains in the left iliac fossa. He claimed that he obtained complete relief as long as the medicine was administered. Another patient has taken the same dose for his hyperchlorhydria for two months steadily without discomfort.

Considering first the therapeutic action of atropia in diseases of the alimentary canal, I will first refer to its use in salivation. Here it enjoys a very high reputation owing to its ability to lessen salivary secretion. Hence it has been recommended and extensively used in the ptyalism following excessive use of mercury and that accompanying pregnancy. As regards the former, I have not in the cases coming under my care, felt any necessity for its use, as the ordinary antidotes of mercury and cleansing mouth washes accomplished all that was desired. As to the salivation of pregnancy, I tried it one unusually severe case, in which Dr. J. N. Mitchell was associated with me as consultant. Here it failed utterly, as did every other treatment.

In hyperchlorhydria atropia effects wonderful results. It is in this condition that I have had the largest experience in its use. The relief appears within a few days after beginning its administration. Sometimes it does the work unaided by other measures. In other cases it requires the assistance of dietetic measures and the use of mild laxatives to relieve an associated constipation.

That the associated treatment is not the whole cause of the improvement and that the atropia is the important factor is suggested by the following case: Mr. L., aged 58 years, first consulted me November 20, 1905. He had suffered from "indigestion" as long as he could remember anything. For many years he was under the care of an eminent old school therapist, now deceased. His weak digestion showed itself by distress or pain in the epigastrium coming on very shortly after eating; sometimes the pains ran up into the shoulder. Quite frequently the heart suffered, as shown by precordial pains and palpitation. Nausea and vomiting were of rare occurrence. His bowels had been variable. He had succeeded in keeping them regular by the free eating of fruit in the summer time, and the use of Veronica water in winter. His

habits have always been excellent. In fact, his delicate health forbade indiscretions. His stomach contents had been examined by a competent chemist and the diagnosis of hyperchlorhydria made in consequence.

At the time of coming under my care he complained of great soreness across the epigastrium coming in about two or three hours after eating, and associated with palpitation of the heart. Physical examination was negative other than showing a slight gastropnoxis and swashing sounds in the stomach on succussion.

Atropia sulph, gr. 1-400, three times daily was prescribed. On November 24 he reported himself as feeling more comfortable. He still had a little of the palpitation and an occasional sensation of pain. His general condition was certainly better. He lacked the mental depression which had existed formerly, and of which he did not tell me on his first visit. His sleep was improved. He had continued the use of Veronica water and had not altered his dietetic habits. On November 28 the improvement was even greater. For the last three days he had been annoyed by dryness of the mouth and throat. On December 5 the improvement was still greater. But now he complained of what he described as a congestive headache, associated with pains in the eyes; but the dryness of the mouth and throat was much less. The atropia was now reduced to twice daily. During the next ten days he was occupied in a very important and trying law case. He went through the ordeal without any relapse. Under ordinary circumstances, he would have felt the strain, and suffered with his stomach; and yet he had no pain, and but little nervousness.

Since January 5 the patient has seen me but once, and then only to secure advice to guard himself against a possible return of the symptoms.

The following case shows marked improvement under atropia, notwithstanding the fact that the patient persisted in all of his bad habits: Mr. F., aged 27 years, consulted me February 6, 1900. He had suffered from "a bad stomach" since the age of twelve years. At that time he had considerable lassitude, poor digestion and bad appetite. Since then his condition has been changeable; feeling badly a couple of days, and then having a few days of comparatively good health. He never has had what might be called a relish for his food. At

the time he came under my care he represented himself as feeling much worse than usual. He complained of a heavy feeling in the stomach after eating. Sometimes he has, shortly after eating, a violent pain, which he attributes to the accumulation of wind. He was and still is a great smoker, consuming never less than twelve cigars daily. In addition he chews tobacco. He has never had any vomiting, and very seldom any nausea. He was treated by a former attendant by lavage for four months without any benefit. His case was diagnosed as one of chronic catarrhal gastritis at that time. His bowels were perfectly regular, moving twice daily without difficulty. He had a great deal of flatulence. His stomach feels greatly swollen after meals, no matter how small the quantity of food he eats. It may even begin to swell while eating, thus interfering with his partaking of the necessary amount of food for his nutrition. The gaseous eructations taste of food; sometimes they are accompanied by very sour eructations. He indulges to excess in sexual intercourse. He denied both syphilis and gonorrhœa. Physical examination was negative. Examinations of gastric contents gave a decided hyperacidity. Atropia in doses of one two-hundredth of a grain, three times daily, was prescribed. Improvement was prompt. After three months' regular attendance he abandoned treatment. There was a relapse one year later, and again relief was obtained from the atropia. In December he had a return of the pain in more severe form than ever before. He had been working hard, and had taken whisky to excess, as well as continuing his former habits as regards the tobacco. Then the atropia was renewed, but this time in conjunction with doses of strychnia sulph, one-thirtieth of a grain each. The result was once more prompt and satisfactory.

Miss —, aged 23 years, consulted me for the first time on September 8, 1905. She had not been in good health since the age of twelve years. At the age of fourteen she began with severe pains at the menstrual periods, which grew worse as time progressed, until they finally became practically constant. Five years ago she consulted a gynecologist, who advised operation, and removed the uterus and both ovaries. Menstruation ceased. But since the operation she complained of leucorrhœa. At the time she consulted me, her chief complaints were pronounced weakness, flushes of heat alternating

with chills, which began shortly after the operation, and had continued to the present time. She had severe pains in the epigastrium aggravated by eating. No flatulence; bowels perfectly regular. The appearance of the patient was highly anæmic. The hæmoglobin was 75 per cent. A blood count was not made. Ferrum redactum was prescribed. The physical examination was negative aside from an anæmic murmur at the base of the heart. Improvement was rapid until September 20, when the hæmoglobin amounted to 90 per cent. Owing to the epigastric pains, the prescription was then changed to atropia, gr. 1-400, three times daily. This brought prompt relief. Finally, the hot flashes and chills became annoying, and ovarian extract was administered in doses of three grains three times daily. For a time it gave great relief. Then there was a relapse, and the atropia was given once more. Improvement continued steadily, and late in January the patient was discharged practically well. A single attempt was made to examine her stomach contents. On both occasions the stomach was found absolutely empty. On the second examination the stomach contents were taken forty-five minutes after the test meal.

It may be said of the above cases that none of them were examples of pure hyperchlorhydria. And this criticism is true. In two of them the hyperacidity was proven by the chemical examination of the gastric contents. In the third case an examination was impossible, owing to the rapid emptying of the stomach. In each of the cases there were general disturbances, which gave the patients as much discomfort as the gastric symptoms.

The use of atropia in the treatment of the gastric neuroses is to my mind not sufficiently recognized. Einhorn (*American Medicine*) speaks disparagingly of his results. In his textbook on Diseases of the Stomach he ignores it entirely. Hemmeter rests satisfied with quoting Riegel, who first gave his experiences in 1899. Hemmeter himself says nothing for or against the drug. In his work on Diseases of the Stomach (*Nothnagel's Encyclopædia*) Riegel leads his reader to infer that the beneficial effects of belladonna and atropia are due to the narcotic effects of the drug, although he quotes Penzoldt to prove that atropia is capable of diminishing the quantity of the gastric juice. In a former publication (*Verhandlung d.*

Congress f. Innere Medicin, 1899) he says that the amount of hydrochloric acid in the gastric juice was reduced by atropia to one-third or one-half of the usual amount. Goodno (*Hahne-mannian Monthly*, January 1901) speaks very enthusiastically. He says: "When such results are so frequently met in the treatment of so rebellious an affection, it is difficult to restrain one's enthusiasm."

My personal experience, which has been large, is eminently satisfactory. Of course, the drug is not to be regarded as a specific, for it sometimes fails. In some instances, the good effects have been increased by the administration of digestive agents. A formula which I have used in this connection is the following:

Pepsin,
Pancreatin,
Ox-gall, aa, gr. j.
Diastase,
Nux vomica,
Aromatics, aa, gr. $\frac{1}{4}$.

S. One or two pills to be taken immediately after eating.

In cases where there is much flatulence, I have also employed preparations of the carica papayans combined with pure willow charcoal, giving doses immediately after, and one hour after meals.

We of the homœopathic school have for many years been employing belladonna and atropia as remedies in gastralgia, the special indications for its use being the sudden onset and disappearance of the pains, which are almost invariably of a severe grade. We have also prescribed them for acute gastritis on the same indications. Hare (*Practical Therapeutics*) also speaks favorably of belladonna in the latter affection, especially when the pains are attended by collapse. As an adjuvant, he recommends flaxseed poultices.

Among intestinal affections, my experience with atropia has been limited to cases in which the symptoms led me to believe that I was dealing with an enterospasm. Such cases are illustrated by the following: A woman, aged 50 years, was taken suddenly with severe abdominal pain. On my first examination the pain was referred to the region of the gall bladder. Very shortly it shifted to the epigastrium, and again to the umbilical region. Each time the pain moved she

described a "giving way" feeling and "movement of the gas." Another case, first seen in the fall of 1900, complained of a sensation as of a ball in the left inguinal region associated with severe paroxysms of pain in that locality. I treated him for nearly a year without accomplishing anything. Then I gave him atropia gr. 1-200 t. d., and relief was both prompt and satisfactory. This patient insisted upon constant use of the drug up to the time of his death from pneumonia, last fall.

Many German physicians have been very lavish in their praises of atropia in strangulated hernia and bowel obstruction. Ostermaier (*Munch. med. Wochenschr.*, September 9, 1902), reported a case of strangulated hernia in which taxis had failed. He injected one-tenth of a grain of atropia, and the hernia reduced itself. He also reports five other cases. In one of these he gave three injections before accomplishing a result. He urges that a sufficient dose be given in the beginning. The drug has the advantage over morphia of not masking the symptoms.

Batsch (*Münch med. Wochenschr.*, July 3, 1900) strongly advises atropia in doses of one-twelfth of a grain hypodermically in cases of intestinal obstruction.

Pritchard (*Hahnemannian Monthly*, November, 1901) reports a successful case diagnosed as ileus, in which smaller doses, repeated, gave good results.

Altogether about two dozen cases of ileus treated by atropia in large doses were reported in the *Münchener med. Wochenschr.* Of these four terminated fatally.

The treatment does not seem to hazard the patient's chances should an operation afterwards prove necessary, because the results are prompt. Whether all of the cases were ileus or not cannot be affirmed. Undoubtedly, an apparent bowel obstruction can result from enterospasm. Indeed, surgeons have operated such cases, and discovered this condition to be present. It would seem to be the proper course in all cases of bowel obstruction to give this treatment early. Should it fail, the delay has not lessened the patient's chances from operation.

In other abdominal affections, my experience with atropia is limited to gall-stone colic and renal calculus. In both of these painful affections I have given the drug in doses of 1-200 of a grain at intervals of six hours for the first day. After that the doses should be not more than three daily.

In diseases of the respiratory organs my experience with atropia has been limited to acute rhinitis, bronchial asthma and œdema of the lungs. The experience with acute rhinitis is of recent date, and is limited to myself as the patient. Among the varieties of coryza from which I occasionally suffer is one in which there is a profuse fluid discharge, so profuse indeed as to drive away sleep. In my last attack, feeling desperate, I took a dose of one two-hundredth of a grain of atropia about one hour before retiring. The result was magical. The night was spent in comfort, and in the morning there was no trouble whatever. Of course, one experience of this kind cannot be made the basis for a general conclusion. I present it as interesting as far as it goes.

In bronchial asthma I have used it altogether in probably half a dozen cases without any other remedy, and with good results. It is not to be regarded as a remedy to palliate the individual attacks. It is a true curative remedy, gradually ameliorating the present seizure and preventing recurrences. In as many more cases I have administered it along with small doses of potassium iodide with good results.

Edema of the lungs is such a desperate condition that one can expect but little. If there is anything that will help such cases, it is atropia given hypodermically in doses of one-sixtieth of a grain. O'Donovan, of Baltimore (*American Medicine*, Vol. II, p. 410), recommends that it be combined with strychnia, 1-30 gr. It does not, of course, absorb the exudate already present, but it prevents further increase of the trouble, and improves the cardiac action, so that nature has a chance to bring about relief.

A FAMILY WITH IRIDEREMIA.—Dr. T. K. Hamilton reports the occurrence of irideremia in five members of one family. In considering this group, he remarks the various conditions there are associated with the absence of the iris. Among these he found marginal changes of the cornea, probably the so-called fetal ring; microphthalmia, high arched palate and non-symmetrical jaw, defective permanent teeth, lenticular opacities and dislocation of the lens. This series of cases is mentioned to illustrate the fact that heredity is a factor of importance in the etiology of irideremia. As regards treatment, Hamilton advises the wearing of amber tinted glasses, as suggested by Seabrook.—*The Ophthalmoscope*.

CHRONIC GONORRHOÆAL URETHRITIS.

BY

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WERE it not for the fact that so many practitioners of medicine regard lightly an attack of gonorrhœal urethritis, and were it not for the carelessness and indifference with which they treat the same, the percentage of chronic gonorrhœal urethrites would be reduced materially. As it is, the majority of cases of gonorrhœa become chronic.

In treating an attack of chronic urethritis, the sole aim of the average physician seems to be to check the urethral discharge, which may be either slight or profuse, intermittent or constant, by intra-urethral injections and internal medication, without the slightest care or worry as to the real underlying cause of the discharge.

In about 90 per cent. of cases a chronic urethritis is kept up by some morbid condition behind the sphincter urethræ muscle, be that an inflammation of the mucous membrane of the posterior urethra, or a glandular or parenchymatous prostatitis, or a prostato-cystitis, or a seminal vesiculitis and epididymitis. Rarely gonorrhœa involves the entire bladder, ureters and kidneys. In the anterior urethra the gonorrhœal process is maintained by an inflammation of the glands and follicles of the urethra, erosions and ulcerations of the mucous membrane, strictures, polypi diverticuli and a congenitally small meatus.

Improper and injudicious treatment, alcoholic and sexual indulgence, patients of a strumous and gouty type, prolonged physical exertion incident to the patient's occupation, all are causes of the continuance of a urethritis.

What, now, are the symptoms of chronic gonorrhœal urethritis? The one and only objective symptom is a purulent or muco-purulent discharge, which is habitually worse in the morning on rising. As a rule, all the patient complains of is a drop of pus at the meatus in the morning, with an agglutination of the lips of the meatus. On account of the frequent

flushings of the urethra by the urine, but little or no discharge is noticed during the day, unless there be an acute exacerbation of the chronic process.

Subjective symptoms there are as a rule none, with the exception, perhaps, of an occasional neuralgic pain or some tickling or itching along the urethra. In many cases of posterior urethritis there is no discharge visible and the patient complains of absolutely no symptoms referable to the deep urethra, and thus the affection remains unrecognized until, perhaps, an acute exacerbation occurs, when the inflammation may easily spread in several directions, as forward, to perhaps light up an acute urethritis, backward into the bladder to set up a cystitis, up the seminal ducts to produce seminal vesiculitis and epididymitis, and into the prostate, producing prostatitis. Each of these affections is, of course, accompanied by the symptoms characteristic to that class. In many cases diminution of the sexual appetite is felt and patients become nervous and weak, and seminal emissions become frequent. This is specially found in those cases of chronic urethritis in which the prostate and seminal vesicles are involved. If the patient is constipated, hard fecal matter may press upon the seminal vesicles and prostate, causing the expulsion of the accumulated morbid products in them, and, appearing at the meatus urinarius, leads him to think that he is suffering from spermatorrhœa. Occasionally we have bloody pollutions due to a hyperemia of the ejaculatory ducts.

In the diagnosis of chronic gonorrhœal urethritis we must first consider whether we have an anterior urethritis alone, or whether we also have to deal with a posterior urethritis.

Now, how shall we arrive at a positive conclusion to what extent the urethra is involved and as to what are the various lesions which maintain this chronic urethritis?

The patient is requested to void his urine into two glasses, the first of which is to contain about three or four ounces both glasses contain urine which is either cloudy with shreds or clear with shreds, we have at least an antero-posterior urethritis to deal with. If the first glass contains urine which is either cloudy with shreds or clear with shreds, and the urine in the second glass is clear, or, even if the anterior urethra down to the bulb should have been washed out by irrigation before the patient has urinated and then the urinary gush be

still clear, posterior urethritis cannot yet, to my mind, be excluded. As I have stated before, almost every case of chronic gonorrhœal urethritis means chronic posterior urethritis and the examination by the urine is not complete until the surgeon's finger has been introduced into the patient's rectum, and the seminal vesicles stripped and the prostate gland gently massaged. This manœuver expresses into the prostatic urethra whatever pus there may be in the seminal vesicles and prostate, and it is then passed out with the urine into the test glasses. If we neglect to massage the seminal vesicles and prostate any chronic inflammation of these organs may escape our observation, since the urine may wash the pus which is directly in the prostatic urethra into the first glass and the second may be clear, for the urine flushes only the urethra and not the prostate and seminal vesicles.

The expert diagnostician soon learns to recognize certain shreds. The thread that resembles a bit of cotton thread comes from the anterior urethra. The small granular dust-like material usually comes from the anterior urethra and is mostly made up of epithelial cells and a few pus cells. The shred that resembles a tadpole usually comes from some ulcerated spot or follicle. Angular broken pieces usually come from the bulbous and membranous urethra; they are mostly masses of pus and are often an indication of stricture. Often we find in the urine a sort of fleecy, cottony material which floats on top and which is mostly made up of mucus; they usually come from the prostatic sinus.

To complete the examination, the bulbous bougie or the Otis urethrometer and the urethroscope should be employed. Right here I wish to emphatically state that no instrumentation within the urethra should be done when there is a purulent discharge from the urethra unless there be a retention of urine of which the patient must be relieved. The discharge having first been relieved by local and internal treatment, the bulbous bougie or the Otis urethrometer should be employed for the detection of any contractures within the anterior urethra. The meatus being the narrowest portion of the entire urethra, an instrument which the meatus admits should pass along the entire canal without any obstruction. Often we meet with a congenitally small meatus when it becomes necessary to do a preliminary meatotomy before the urethra can be successfully

callibrated. Next a sound should be passed to ascertain whether or not there is any contracture of the neck of the bladder or a stricture of the membranous urethra.

To intelligently employ a urethroscope is a quite difficult matter, for to look through a urethroscope and to recognize that which one sees are two entirely different things. The lubricant used must not be an oil or any grease, but one which is readily soluble in water. For this purpose I employ a lubricant made up of powdered tragacanth one part, glycerine six parts and two per cent. carbolized water twenty-four parts. The tube is introduced down to the bulb, the obturator removed, and the urethra is inspected while the endoscope is slowly withdrawn. Thus the experienced eye is enabled to detect any abnormal changes in the mucous membrane, strictures, granular spots, suppurating follicles, polypi, warts and diverticuli. I am not much in favor of the posterior urethroscope, as by its use often more damage is done to the posterior urethra than there is benefit derived from its inspection. Usually the rectal palpation of the prostate and seminal vesicles, the examination of the urine and the general symptoms are quite sufficient to lead one to arrive at a conclusion as to the condition existing behind the sphincter urethræ muscle.

To go into any detailed consideration of the treatment of chronic gonorrhæal urethritis, too much time and space would be required. I therefore will only briefly, and necessarily incompletely, consider the treatment.

The patient should be instructed as to cleanliness, rest, diet, hygiene. Internal medications by diluents, alkalies and balsamics may be of benefit. Irrigations of the urethra with solutions of potassium permanganate or of one of the silver preparations should be employed when there is a frank discharge, and should be kept up until the urine becomes clear. If there is chronic seminal vesiculitis and prostatitis, both seminal vesicles and prostate should be massaged about every two or three days, and this is to be followed by instillations into the posterior urethra of, preferably, Silver Nitrate solutions commencing with a strength of about one gr. to the ounce of water up to about five or even ten gr. to the oz. Not until the posterior urethritis is almost or entirely cured need any special effort be made to cure the existing lesions in the anterior urethra. Strictures, if present, should be removed by gradual dilatation or urethrotomy—

dilatation should always be given a trial before urethrotomy is resorted to. A small meatus should be cut up to the size of the normal urethra. Where no strictures exist a full-sized sound should be passed every three or four days, and this should be followed either by irrigations of the urethra or by instillations of Silver Nitrate.

The urethroscope should be judiciously employed—suppurating follicles, if possible, should be injected or cauterized, granular spots touched up with a strong solution of silver nitrate, and, if any warts or papillomata exist, they should be excised.

As to the length of time required to effect an absolute cure a rule, which would be even approximately correct, can, to my mind, not be given, as success in the treatment of this disease depends upon so many conditions which are intimately associated with the patient's general health, constitution and mental state. Cases of chronic inflammation of the entire urethra, complicated by a prostatitis and perhaps seminal vesiculitis, persist in "hanging fire" from month to month, despite the surgeon's best efforts to cure.

Now, when does a gonorrhœic cease to be infectious? Certainly not until all gonococci have been eliminated, and none can be demonstrated after some of the tests of which I shall speak shortly. To find this diplococcus is by no means an easy matter. A patient may present no discharge at his meatus urinarius, his urine may be clear and even free from shreds, and still a few pairs of gonococci may be hidden in one of the numerous crypts of the prostate, or in the seminal vesicles. Or, on the other hand, the lips of the meatus may be agglutinated in the morning, a drop of pus may present itself in the fossa navicularis, the urine may contain shreds, and yet no gonococci be demonstrated under the microscope. The cases that are in all probability still infectious are those that continue to have pus in the urine and suffer from relapses at every indiscretion, either sexual or alcoholic. The majority of those cases that have had gonorrhœa, and whose discharge has ceased, or perhaps not entirely, and who do not suffer any relapses after sexual or alcoholic dissipation, are probably not infectious. Those who, having had gonorrhœa, present no longer any discharge and have absolutely sparkling urine, and maintain this condition for a month and over, can safely be pronounced free from infection.

To arrive at a positive conclusion, it is necessary first to make slides of the expression of the contents of the seminal vesicles and prostate, obtained either directly from the urethra or by centrifuging the urine, and after having obtained the specimens in the usual manner at least three or four slides should be inspected most thoroughly microscopically. Should diplococci be found, Gram's differential stain should be employed, and if this does not show the presence of gonococci it is safe to assume that the patient is not infectious. While other methods in vogue to arrive at a positive conclusion as to whether or not a man is still infectious appear to me unscientific, they may, however, be accepted as fairly accurate. The patient is requested to drink freely of alcoholic beverages and to indulge in sexual intercourse, or the urethra is irritated by the passage of a full-sized sound and a strong solution of Nitrate of Silver is instilled along the entire urethra. If there is no return of any urethral discharge, or if this discharge, which is usually produced by the irritation of the Silver Nitrate, presents no gonococci, the patient may be dismissed as cured.

CEREBRO-SPINAL MENINGITIS.

BY

M. E. USILTON, M. D., PHILADELPHIA, PA.

(Read before the Wednesday Night Medical Club.)

THE affection known as cerebro-spinal meningitis, or "spotted fever," has recently been occupying the attention of medical men and exciting the interest of the laity. This disease is especially one of modern recognition, and I say modern recognition and not of modern origin advisedly, for before the nineteenth century there was no possible differentiation of this disease from typhus fever, pernicious malarial fever and other forms of inflammation of the brain and spinal cord.

Cerebro-spinal fever first attracted attention in Genoa in the winter of 1805 and was called cerebral ataxic fever. The next outbreak of the disease was in our own country at Medfield, Mass., in March, 1806. France, Italy, England, Norway, Sweden and Germany were then successively invaded. One of

the peculiarities of the spread of this disease is the exemption of contiguous countries under the same general conditions; thus, while severe epidemics have visited Germany, on the north, and Italy, on the south, Austria has remained almost free from epidemics. Our own country has always offered a fertile soil for this disease, all parts of the country being affected.

In all these epidemics there was no special altitude or soil which seemed to favor its spread, as it was found on the high and dry plateaus, as well as on marshy grounds, thus differing from malaria. The season of the year has much to do with its occurrence and spread, as practically all the cases occur in the colder months of the year. This may be due simply to the fact that we are housed up and confined more at this season of the year, thus depriving our systems of nature's greatest resistant agent to any infectious disease—fresh air and sunshine. Cold alone, however, will not account for the cause of this disease, as several cases have occurred in the midst of summer in hot countries, as Italy. Cerebro-spinal meningitis shows an especial predilection for the young, as three-quarters of the cases in the recent New York epidemic, as well as in Philadelphia, occurred in individuals under fifteen years of age, and in the five cases I have had the opportunity of seeing all were under six years of age.

There seems to be no difference in its prevalency as regards sex. The popular belief that this affection occurs among soldiers particularly is not true, as in several of the epidemics it has passed by the towns where large bodies of troops were quartered and attacked the civic population, and in the war of the Rebellion both citizens and soldiers suffered alike. Recent epidemics seem to attack cities rather than the rural districts, whereas in former years the reverse was true.

The mode of onset, symptoms and epidemic forms of this affliction assign it in the category of acute infectious diseases. As to its being a contagious disease, capable of transmission by contact there is great doubt. A strict localization of this disease to certain houses, or even stories of a house, is a marked peculiarity of it, notwithstanding the fact that people go to and from the afflicted persons and do not carry it to other families or persons in the same house.

In my opinion, the disease is infectious, but not contagious,

and is not transmitted through the excretion or by clothing. As we say of typhoid fever in regard to direct contagion, its striking distance is small as is proved by its limited area of distribution in any epidemic both before and during our present system of quarantine.

The disease is no doubt due to a specific micro-organism, and several have been described and claimed to be the specific one, only to be disproved later on. In 1887 Weichselbaum described an organism—the intracellular diplococcus of meningitis—which was found in the recent epidemic in this city and New York. This organism resembles in some respects the gonococcus, being of oval shape, usually occurring in pairs and within the leucocyte cells. They are especially to be found in the sero-pus obtained by lumbar puncture. Cultures of these, however, fail to produce a meningitis when injected into the lower animals, and, I think, personally, the true specific micro-organism is as yet to be found, and, as in diphtheria, there has to be a special soil or predisposition for the production of cerebro-spinal fever.

The symptoms of this disease come on suddenly, with evidences of profound toxæmia, usually beginning with a chill, and in children with convulsions, pains through head, back and limbs, hyperæsthesia of the special senses, vomiting, constipation and irregular fever and pulse.

In the severe cases the fever usually runs high, while in other mild cases it runs from 99—100 deg. F. The pulse at first is usually rapid, full and strong, later on taking the peculiar characteristic sign of cerebro-spinal fever, viz.—*irregularity*. The five cases I have seen, all being in children, began suddenly with convulsions, and in three of these chloroform had to be used to control them, the two other cases being controlled by the injection of bromides per rectum. The temperature in the three cases that recovered for the first five days varied from 100°—102° F., and being very irregular in its rise and fall. The pulse varied from 100 to 120, later on falling to 70 and 80, and very irregular, this feature being a characteristic of all the cases seen. Opisthotonos was found in all of these cases, varying in its degree of severity. Each of the two cases which ended fatally had the Cheyne-Stokes respiration, one of these cases lasting four days, with this character of breathing.

This respiration is accounted for by Leyden as due to pressure on the medulla by œdema.

The arrest of nasal secretion given by many authors as peculiar to cerebro-spinal fever I did not observe in any of the cases cited. The urine examined in three of the cases was of low specific gravity, highly colored, and contained albumen. Severe vomiting, involuntary defecation and urination, Cheyne-Stokes or sighing respiration, irregular pulse and coma are the bad prognostic signs of this disease. The symptom which has led to this disease being called "Spotted Fever"—the eruption may be of almost any variety from an erythematous blush, which comes and goes, especially on the cheeks, to the regular petechiæ found on the body. Herpes is a very common condition here, as in pneumonia, but is not diagnostic as some authorities state. Pain in the head is usually severe, and the child screams out with it as in agony; but, fortunately, this pain comes suddenly and goes suddenly, thus being only momentary generally.

Opisthotonos, one of the symptoms noted above, is usually present in some degree at least, but is not of much prognostic value as regards its severity in any given case. This condition is due to the abundant exudation about the medulla, causing a tonic contraction of the deep muscles of the neck (the *scaleni*), while the *trapezius* remains unaffected. In two of the cases the opisthotonos occurred on the third day, while in the remaining 3 cases this symptom came on from the fifth to the ninth day. There is always some rigidity of the neck, which we can determine by attempting flexion of the head upon the chest.

COMPLICATIONS AND SEQUELLÆ.

When we consider the profound poisoning of the blood which occurs with this disease and the general inflammation of the membranes covering the brain and spinal cord, together with the nerves radiating thence over the body, we are not surprised at the manifold complications which occur and the sequellæ left after the victim has escaped with his life. Pneumonia, neuritis, ear disease and corneal ulcers are the most frequent complications. Idiocy, paralysis and persistent headaches are among the sequellæ.

The duration of cerebro-spinal fever varies from the acute severe cases lasting twenty-four hours, to the ones lasting months.

DIAGNOSIS.

The diagnosis of this disease from other forms of meningitis is often very difficult and sometimes impossible during life and can only be made post-mortem.

The greatest difficulty, I think, will be found in differentiating this form from tubercular meningitis and also the meningitis following the other infectious diseases, such as pneumonia, typhoid fever, influenza, erysipelas, etc.

When we consider the sudden onset, vomiting, convulsions, rigidity and opisthotonos, hyperæsthesia of the senses, pains, irregular temperature and pulse, with the eruption, we can usually separate this affection from the other forms of meningitis. Tubercular meningitis is the most difficult to differentiate. In tubercular meningitis we often have the history of tubercular inheritance. There is usually some lesion in the lung to which the meningitis is secondary. The onset is gradual, fever low and pulse slow in the beginning. The nervous symptoms are not so severe and occur later. Vomiting is more pronounced, earlier and more constant, as tubercular meningitis usually affects the base of the brain. The case drags along and gets better, having periods of aggravation and amelioration, and usually ending fatally. There is no eruption and herpes is usually absent.

There are several methods by which we are told cerebro-spinal fever can be positively diagnosed; but, under recent observation, these methods are proven to be absolutely unreliable. Kernig, of St. Petersburg, reported as characteristic of cerebro-spinal fever that when the hip is flexed with the patient in a sitting posture, contracture of the flexors of the leg prevents full extension of the knee without undue force. This observation has been corroborated by Osler, Netter and other authorities; but it has also been found to occur in other forms of meningitis and in diseases affecting the roots of the spinal nerves.

Lumbar puncture is a very valuable aid to us in diagnosing this disease. The puncture is made between the third and fourth lumbar spinous processes, so as to withdraw the cere-

bro-spinal fluid from the cul de sac of the dura surrounding the cauda equina. Have the patient upon the right side, with legs and hips well flexed upon the body, so as to put the spinal column upon a stretch, and then puncture with a fine trocar or aspirating needle a little to the left of the median line in adults to avoid the thick ligaments and directly in the median line in children just above the spinous process.

Remove the fluid slowly and it usually comes drop by drop. It is usually sero-purulent and contains micro-organisms, both intra-cellular and extra-cellular. Recent French writers claim that in cerebro-spinal fever the polynuclear leucocytes predominate, while in tubercular meningitis the exudate contains lymphocytes. They also claim that the meninges are impermeable to Iodide of potas. in cerebro-spinal fever, and the iodine cannot be detected in the fluid obtained by lumbar puncture, while in tubercular meningitis it can. In several cases of undoubted epidemic form in New York recently this test was found to be unreliable.

PROGNOSIS.

The prognosis is always grave. As in all infectious diseases, the character of each epidemic varies. In the recent New York epidemic the mortality was eighty per cent. The younger the person the more sudden and violent the onset, and the early occurrence of vomiting are all bad prognostic signs. If the patient survives the first week, his chances of recovery are generally fairly good.

TREATMENT.

The treatment of cerebro-spinal fever is only in its infancy, and I have no doubt that an anti-toxic serum for its relief will be discovered which may give as good results as the diphtheria antitoxin.

The most important step in the treatment of this affection, as we all know, is *perfect quiet and rest in bed*. Have the room darkened and away from the noise of the street. There is no disease in which absolute quiet is so necessary as in this one. It is even more important than the diet or medicines or any other therapeutic measure. Have the room well ventilated and allow only the attendant to enter the room, as the slightest noise or disturbance will often throw the patient into a convulsion.

In the cases I have had under my care the bromides acted very nicely in controlling the irritability of the patient. They are preferably given by injection per rectum. Hot baths, given three times daily of fifteen minutes' duration, at a temperature of 104° F., are very satisfactory, and in my opinion much better than the cold ice bag method of treatment. Chloroform and opium are sometimes necessary to control the convulsions and pain. A necessary item to be looked after are the bowels and these should always be moved freely by *calomel* and not by enemas, as we want to relieve the body thoroughly of all means of irritation.

The patient should be given a nourishing diet—broths, milk and orange juice are especially beneficial. After the fever has subsided, eggs, fish and white meat of chicken can be given. Oftentimes we have to feed by the stomach tube, or even rectal feeding may have to be undertaken.

The early stages, according to the symptoms, call for belladonna, veratrum vir, bryonia and gels. We have to select another class of remedies as soon as the inflammation of the meninges is fully established. Cuprum aceticum and cicuta vir are very good, the former where the cerebral symptoms are most prominent, and the cicuta for the spinal symptom, such as pains in the limbs and back and spasmodic action of the muscles of the extremities. Iodide of potassium is the remedy *par excellence* for the later stages of this disease.

The complications we meet with are to be treated as in any other disease. Some authorities give the continued electric current through the length of the spine to favor the absorption of the exudate in the later stages, but this is of doubtful value. All of my cases were treated with absolute rest and quiet in a darkened room, plenty of water, orange juice, milk and broths, hot baths, calomel, bromides to control convulsions and, if necessary chloroform. Belladonna or veratrum vir. in the early stages and Iodide of potas. in the later stages to favor absorption.

REMEDIES IN WHOOPING COUGH.

BY

F. A. GARIS, M. D., BETHLEHEM, PA.

I have taken up this subject for the purpose of bringing before the members of the society, two medicines that have stood me in good stead in times of stress from the above-named disease. Fearful and troublesome as this disease sometimes becomes to both patient and parents, since using these medicines, most of these difficulties are overcome and the little patients are enabled to pass through the several stages of the disease quickly and comfortably.

Our text-books give us such excellent remedies as gelsemium, belladonna, ipecac, hyoscyamus, *corrallium rubrum*, *mephetis*, *cupr. met.* and a host of others, used either alone or in various combinations, and excellent results have followed their exhibition.

The remedies I wish to call especially to your attention are not new; on the other hand, they are old and tried friends in other diseases and probably many of you can attest to their worth in whooping cough.

These little patients, when seen in the beginning of an attack, as soon as a diagnosis is made, are placed upon *drosera tinc.* and *naphthaline 2x*.

The cough quickly becomes loose, the frequency is diminished, child is able to expel mucous without severe vomiting, sleeps much better at night, appetite improves and there is a distinct absence of the distressing symptoms usually attendant upon whooping cough. When cases are seen later, in the convulsive stage, the symptoms improve quickly and the patient weathers out the disease in comfort. In Bethlehem, at the present time whooping cough is epidemic and numerous calls are made upon us for something to relieve the little sufferers.

In my practice *drosera tinc.* and *naphthaline 2x* constitute almost my sole prescription and excellent results are obtained.

ANALYTIC STUDY OF CARBO VEGETABILIS.

BY

EDWARD FORNIAS, M. D., PHILADELPHIA, PA.

NERVOUS SYSTEM.

MIND AND SENSORIUM.—(1) *Indifference*: Patient wishes to be quiet. Irritable, if disturbed. *Peevishness*. *Restlessness and anxiety, in the evening*. (LYC. After midnight: ARS). Feebleness of memory, sudden or periodical. Confused ideas. Intellectual torpor. *Irascibility and sudden burst of passion* (NUX V.): (2) *Vertigo*, in bed, when sitting up after sleep, induced by quick motion of the head, stooping, walking; or *with nausea*, vanishing of sight, buzzing in the ears, trembling, &c. Gastric vertigo, *after debauch*. From flatulence. Venous stasis.

DISORDERS OF NERVE FUNCTION.—*Sleepiness by day*, vanishing with motion; with yawning and stretching, both mornings and afternoons. *Late sleep, or insomnia*, caused by restlessness of body. Sleepy early in the evening, but *cannot go to sleep till late* (1 A. M.); from anxiety, restlessness or from congestion of the head, especially after debauch. (ARS. after midnight). Rapid sinking of forces (ARS., VERAT ALB.).

DISORDERS OF SENSATION.—Pains fly over the body (PULS). *Drawing, tearing pains* in various parts of the body, especially in the limbs, occiput and muscles of the neck. *Burning in chest, stomach, abdomen, rectum, female sexual organs, &c.* (ARS., SULPH.); as from glowing coals, in the chest, with weak, fatigued feeling (PHOS. AC., STANN, SULPH). The *burning* is attended with *aching*, sometimes with *itching*; in the limb, with *numbness*; in the chest with *excoriation*; in the angles of the eyes, with *pressure*; in the throat, with scratching and soreness; in the vagina and rectum, with smarting and soreness. *Weight in occiput, or pressure across the forehead*, < even by weight of hat. *Pressing*, just above the eye, with tears. *Dull occipital headache*. *A tight feeling in the chest*, with coughing and scraping, and tickling down the throat. *Itching* in the genitals, in the vulva, in the anus, &c. Sensation as of a *splinter in the throat*. (HEPAR, NITRIC ACID, ARGENTUM. NIT.).

VEGETATIVE SYSTEM.

DISORDERS OF NUTRITION.—*Perverted metabolism.* Atrophy, Ulceration, *Carbuncle*, Necrosis, *Gangrene* (humid; senile, of lower limbs); Malignity (ARS.); *Putridity* (LACH.); *Hectic*. *Typhoid condition.* *Low vital powers*; Chlorosis; Anemia. *Sepsis.* *Decomposition of blood* (bed-sores; *scurvy*; *varices*; livid (Lach) ulcers, with fetid corroding discharge, easily bleeding). Capillary stagnation, causing blueness and coldness. Ecchymosis. *Aneurism* by anastomosis (CAUST., LYCOP., PLAT., THUJA.); tumor, bright-red, round, flat. *Lymphatic glands*, swollen, indurated or suppurating, with burning pains (ARS.). *Hemorrhoids* (acid, viscid discharge, causing itching and some smarting, or protruding, burning; after debauch; with constipation). Acidity; *Fermentation (uric acid)*. *Lithemia* (LYCOP). *Looseness of the teeth*, with retraction, excoriation, ulceration and suppuration of the gums, which sometimes bleed and burn like fire (*Pyorrhæa alveolaris*). (MERC., HEP., SILICA).

DISORDERS OF SECRETION.—*Great foulness of all secretions.* Thin ichorous, bloody, excoriating fetid discharge from the ear. (CALC. C., SULPH., PSORIN). Ejection of watery mucus from the stomach. *Stools*, scanty, difficult, even when not hard. Light-colored, fetid; watery; mucous, bloody with tenesmus (SULPH.); or *burning* (ARS.); putrid, cadaverous smelling (CALC. C., CALC. PHOS, SECAL., PSORIN., SULPH.), *involuntary with much flatulence*; *dysenteric*, terribly offensive. *Menses*, too frequent, preceded by colic; *blood*, pale or thick, corrosive, acrid-smelling. *Leucorrhæa*, thin A. M. on arising; or abundant, milky; yellow, greenish, excoriating. KROSOTUM. *Urine*, very dark, as if containing blood (OPIUM, COLCH., NAT. MUR., HEPAR.; like coffee-grounds: HELLEB.); *reddish, turbid*, with urates (LYCOP); copious, light yellow, diabetic; albuminous, in topers. *Sputa*, yellow-green, or purulent offensive (PULS., LYCOP., KREOS., CONI. CALC. C., SILIC.); or reddish frothy (adynamic pneumonia). *Dryness in the ears*, from lack of cerumen or wax.

DISORDERS OF DIGESTION.—*Taste*, bitter or salty. Want of *appetite*. Longing for coffee, acids, sweets, or salty food. *Aversion to milk*, which causes fermentation (butiric acid), with *sour eructations* (CALC. C.); also to meat (LYCOP) and

fat things (PULS.) The plainest food disagrees. After eating, *acidity, fermentation; sour or rancid eructations*; abdominal distention (CHINA., LYC.), persistent nausea (IPEC.), vomiting; burning in epigastrium (SULPH.); especially after debauch (ARS.), or from high living (NUX V.) *Pyrosis. Waterbrash.* Ejection of watery mucus, even at night-time. *Vomiting of food*, in the evening (PULS.); of sour, bilious or bloody masses. *Burning in the stomach* (ARS.), as if full of acid (CANTH., CAPSIC); stomach feels heavy as if hanging down, but tense and full; > from escape of wind, upwards or downwards. *Flatulent Colic*, abdomen full to bursting (CHINA., COLOC., LYCOP.). Fetid, watery, bloody stools, with tenesmus, or *putrid, cadaverous smelling* (CALC. C., CALC. PHOS., SECAL., PSORIN., SULPH.); involuntary (RHUS, SECAL., PHOS. ACID., PHOS., MUR. ACID., ARS.). *Meteorism.* (LYC.).

DISORDERS OF RESPIRATION.—*Difficult breathing. Hoarseness* with rawness, especially towards evening < after prolonged conversation, or in damp, cold weather; obstinate (CALC. C., CAUST., PHOSPH., RUMEX., SULPH.), sometimes amounting to *aphonia. Asthmatic Breathing*, with weakness and trembling. *Incomplete hematoxis*, with asphyxial phenomena (HYDR. ACID.) *Great dyspnœa*, with anxiety; desires to be fanned, as if in need of more air (ARS., SULPH., CUPR.). Loud, rattling breathing; cough ceases; *œdema pulmonum impending. Vesicular emphysema.* Cough, especially in the evening, yields a *greenish, purulent, offensive sputa.* Spasmodic, dry, hollow cough; at times dry and painful; at others with slimy, putrid expectoration, < after cold drinks, or talking. *Bronchial dilatation*, in the aged; hoarse, mucous rales; no reaction (ANT-TART, AMM. CARB., LYCOP.); with *short breathing, blue, cold skin, cold sweat, slow, filliform pulse; complete torpor, impending paralysis* of lungs.

DISORDERS OF CIRCULATION.—*Venous system predominant.* Venous and capillary stagnation. *Abdominal plethora* (ALOES., SULPH., NUX V.) Tension and fullness of the abdomen. Portal obstruction (hemorrhoids, varicose veins). *Blood alteration* (echymosis, bed-sores, purpura, cyanosis). *Septic infection*, especially abdominal. *Complete torpor.* Impending paralysis of the heart. *Circulatory failure. Collapse. Pulse,* weak, intermittent, thready, almost imperceptible. *Imperfect*

arcation of the blood (cyonosis, general coldness paroxysmal dyspnœa). *Hemorrhages* from nose, stomach, lungs, uterus, &c., with short breath (IPEC., red blood; low type ARS., CHINA.); the patient wants to be fanned, is pale, cold, blue, collapsed, with thready intermittent pulse; pointed nose, hippocratic face. *Passive flow* (HAMAM., PULS., SECAL.), with burning in the chest; in the uterus, across the sacrum, or in the lower spine. *Bleeding from the gums, in putrid states* (KREOS., PHOSPH.).

DISORDERS OF CALORIFICATION.—*Loss of vital heat. Algidity* (surface of the body icy cold, especially below the knees to feet). *Cold breath. Cold sweat. Chill*, with icy coldness of the body, or preceded by sweat. *Heat* after, or independent of the chill, flushes of burning heat; heat and sweat commingled (LACH.). *Wants to be fanned during the fever-heat. Thirsty only when cold. Chilliness* in the evening or at night; followed by heat, generally without thirst (PULS.). *One-sided chills* (CANST. L. S.) *Sweat*, in the morning; with subsequent chill, often profuse and sour-smelling.

LEADING CHARACTERISTICS.—Indifference. Vertigo. *Intellectual torpor*. Depression, not preceded by erethism and excitement. (PHOS., rapid transition from erethism to depression). *Low vitality*. Functional torpidity. *Lack of reaction, typhoid state*. (MUR. ACID). *Torpid adynamia, with circulatory failure, steadily advancing to collapse. Incomplete hematosiis* (algidity, cyanosis and other asphyxial phenomena). *Septic infection* (paroxysmal dyspnœa, torpor, circulatory failure, rapid sinking of the forces, thready pulse, collapse. *Venosity* (PULS., SULPH.) Venous capillary stagnation. *Hemorrhages* (passive flow). *Scurvy. Carbuncle. Putridity. Gangrene*. (LACH.) *Malignity* (ARS.) *Blood changes*, ending in ecchymosis, decubitus bed-sores, &c. *Senility. Senile catarrh, with emphysema* (AMM. CARB.) *Bronchial dilatation*, paroxysmal cough, with abundant expectoration, very offensive; ejected with much difficulty (SIL., STANN.). *Respiratory disorders* (hoarseness, aphonia; dyspnœa, wants to be fanned constantly). *Gastric disturbances*, with acidity, fermentation (LYC.), *flatulence* (CHINA); *offensive stools* (CALC. C., CALC. PH., SULPH.), burning pains (ARS., SULPH.), debility (CHINA.). Dislikes meat, milk and fat food. *Pirosiis. Pains*, burning, drawing, acute, with anxiety, numbness and debility,

&c. Sub-acute and chronic diseases. Colliquative conditions and weakness, caused by an excessive loss of animal fluids.

CAUSATION OF DISORDERS.—OLD AGE. *Children*, after exhausting disease. *Chronicity*. *Loss of fluids* (diarrhoea, expectoration, lactation, &c.) *Quinine* (suppression of chill and fever). Summer heat. *Changes of weather* (especially warm, damp weather). *Chronic alcoholism* (ARS., LACH.) *Spoiled fish and meat*. *Ill effects from salt meats*, also from wine, coffee, milk (LYC.), *rancid butter* (PULS.), ice cream, ice water (ARS.) change of water, vegetables. Straining (ARN., RHUS.) Mercury or high living (dyspepsia).

RELATIONSHIP WITH OTHER DRUGS.—CARBO VEG. is antidoted by ARS., CAMPH., COFFEA, LACH., SPIR. NIT. DUL.; and antidotes CHINA., LACH., MERC. CARBO VEG. is frequently indicated after DULC., PHOS, AMM. CARB., KALI CARB., LACH., SEPIA, NUX V., LYCOP., CAUST., SULPH. After CARBO. VEG. are frequently indicated: ARS., KALI CARB., MERC., PHOS, PHOS. AC. CARBO. VEG. and CARBO. ANI are not identical; they do not even follow each other well. CARBO VEG. is composed principally of *carbon* and a small quantity of hydrogen, and of *Calcium Carbonate* (Ca CO_3) and *Potassium Carbonate* ($\text{K}_2 \text{CO}_3$); while CARBO ANIMALIS., besides carbon, contains first *Calcium Phosphate* $\text{Ca}_3 (\text{P O. x})$, then *Calcium Carbonate* (Ca CO_3) and *Sulphur* in very small quantities. CARBO. VEG. is inimical to CAUSTICUM. Complementary to KALI CARB. and PHOS., especially in chest affections; to DULCAMARA in catarrhal hoarseness. *Follows well* after ARS., PHOS. AC. and MUR. ACID in typhoid fever. After AMM. CARB., ANT. TART., LACHES. and LYCOP., in senile catarrh or bronchial dilatation. COMPARE with SILICA, SEPIA., STANN., HEPAR., LYCOP. and CONI., in greenish, offensive expectoration; with CAUST., PHOS, SULPH., DULC., in hoarseness. With ARS., PULS., LYCOP., CHINA and NUX V., in gastric disorders; with CHINA. and LYCOP., in fulness and flatulence after eating and drinking; with CALC. C., CALC. PHOS., SECAL, PSORIN and SULPHUR, in very offensive stools; with ARS. and LACH. in gangrene and ulcers; with ARS. and CHINA. in hemorrhages of low type, or with IPEC. when attended by respiratory embarrassment; with CAMPHOR, VERAT ALB. and ARSENICUM in collapse.

THERAPEUTICS.

Few drugs of our *Materia Medica* have been the subject of such severe criticism as CARBO VEGETABILIS, and this, yet at a time when we know well, that besides a deodorant and antiseptic, it is a tonic and antithermic; that after its absorption by the system it has been found in various parts of the human body (Ebenhard, Charrin) in the blood of the mesenteric veins and the vena porta, as well as in the liver and lungs of animals which had been fed on food containing it (Æsterlen); and that when held in solution, its molecules behave exactly like the molecules of a gas, exerting a pressure upon the wall of the containing vessel by their endeavor to diffuse themselves through the greatest possible space (Van t' Hoff). In view of all this and of the knowledge we possess as to its therapeutic power, we infer that its action is more than purely mechanic, for it seems to check the course of the morbid element at play and carry away through capillaries and veins the products of septic infection or other toxamia; surely enough, in manner unknown to us, but nevertheless positive

Is it its synthesis or its minute subdivision by trituration, with which our critics find fault? In the first place, every educated physician knows that CARBO VEGETABILIS, besides carbon, contains *Calcium carbonate* and *Potassium carbonate*, drugs which have an excellent clinical history. In the second, recent biological researches have abundantly proven the germicidal power of infinitesimal quantities of many chemical substances; and even a man like Brinton, who, by the way, has made the most stupid criticism of Homœopathy known (Action of Medicines, page 36), confesses that *charcoal* is more efficacious when given in the powdered form, and after speaking of its virtues, concludes that one really does not know how it acts in dyspepsia. But there is still another property in the *carbons* (vegetabilis and animalis) which may some day lead to an explanation as to their action upon hematosia. They are decolorizing agents and when placed in contact with living blood they rob it of its coloring matter (hemoglobin), which is so essential to respiratory function. It is a process which appears to furnish a plausible interpretation of the established value of CARBO VEGETABILIS in *extreme adynamic conditions* with defective arterialization of the blood and cardiac failure

The above are all reasonable hints based on the knowledge we have of the specific, pathogenetic and therapeutic properties of this valuable drug. Fortunately, however, we are past the time of experimentation and are now in that of demonstration, and certainly the extensive clinical record of this remedy is brilliant and conclusive enough to satisfy the most inquiring mind. Every experienced practitioner of our school must acknowledge the wonderful efficacy of CARBO VEGETABILIS in arousing the system from the torpor and utter prostration so frequently seen in the *advanced typhoid states*, of septic and other infections. In fact, it has gained its best reputation in the treatment of *diseases characterized by low vitality and prevailing torpor of all the functions*, and this is particularly the case with *poor exhausted constitutions*, and *aged people with bronchial dilatation*, profuse muco-purulent sputa, difficult expectoration, increasing dyspnoea and obvious blueness. In *chronic pneumonia* I have seen the cough controlled, the fetor of the sputum overcome and the general tone kept by the suitable administration of this remedy; and in many cases of *broncho-pneumonia*, with returning catarrh, cough and even slight fever, CARBO VEGETABILIS has acted as a valuable complementary to both ANTIMONIUM TART. and AMMONIUM CARB. After repeated attacks on *catarrhal pneumonia*, as soon as I notice progressive flagging of the powers, with cyanosis, circulatory failure, paroxysmal dyspnoea and ineffectual coughing, I give at once CARBO VEG., which also will be found frequently indicated in *senile catarrh*, with imperfect hematoxis, in *chronic bronchitis* with emphysema and in the *suppurative stage of pneumonia*. Meyhoffer, among our best observers, highly praises this remedy, not only in *long-lasting catarrh of elderly people*, but in persons whose vitality was reduced to the lowest ebb, by insufficient nourishment rather than by disease, with venous capillary dilatation of the pharyngo-laryngeal parts and prevailing functional torpor. Farrington also recommends this drug in *paralytic catarrh of old people, with emphysema* (rattling rales, cyanosis, coldness, torpor), and in *threatening paralysis of lungs* (PHOS., ANT. TART., MOSCH, LYCOP.), when the rattling of mucus is accompanied by the characteristic disorders of circulation and calorification, and there is a *rapid progress towards asphyxia* (HYDROC ACID). He likewise extols CARBO. VEG. in far *advanced cases of lung degeneration*,

with thready intermittent pulse, cold sweat and asphyxial phenomena, the patient being badly in need of more air, and wanting to be fanned all the time.

In all SLOW NERVOUS FEVERS, whether *typhoid, septic, puerperal, hectic or yellow fever*, &c., in which a progressive adynamia is attended by profound stupor, algidity and cyanosis; in other words, in all *extreme adynamic conditions, with lack of reaction*, in which there is a toxic element at work, the blood undergoes rapid degenerative changes, there is a marked circulatory failure, and the nervous centres are utterly depressed, we must always turn to CARBO VEGETABILIS, as our last resort. *But when adynamia is combined with ataxia*, even if the prostration and stupor are extreme, the algidity and cyanosis, notable, and a glacial, clammy sweat bathes the body, the least sign of erethism would exclude this drug and call for ARSENICUM, or for RHUS. TOX., which are our chief ATOXO-ADYNAMIC REMEDIES. CARBO. VEG., then, is only indicated in those cases of *torpid adynamia, without the least sign of irritation*, and we should bear in mind, it stands here higher than PHOSPHORIC ACID, just as ARSENICUM stands higher than RHUS. TOX. in the erethistic form; but it shares honors with MURIATIC ACID, which supersedes the PHOSPHORIC, when putrid symptoms appear, and which also, though perhaps in a lesser degree, tones the system and rouses the patient from the stupor and parietic conditions seen in the *advanced stage of low typhoid states*.

If during any *intense febrile affection*, the temperature falls rapidly, the forces sink suddenly and the extremities become chilled and cyanotic, indicating a condition of lowered vitality, induced by reflex inhibition, I do not know a drug so frequently indicated as CARBO VEGETABILIS. This is a condition brought about also by an *internal*, sometimes by a *post-partum hemorrhage*, but principally by *sudden heart failure*, not only in the crisis, but in the recurrence and even convalescence of febrile diseases.

In the *extreme collapse of cholera*, when the blood has been drained of the fluid parts, the flow of urine has been stopped, and the *algid state* has attained the highest degree of *torpor and prostration, with hardly any reaction*, CARBO. VEGETABILIS comes again not only to replace ARSENICUM, but CAMPHOR, CUPRUM and VERATRUM ALB. It is then that we notice also the whispering unnatural character of the voice (*vox chole-*

raica), as well as the pinched features, sunken eyes, blue areola at the margin of the orbits and flattened corneas (*facies choleraica*). There is no abdominal distress, no vomiting, no diarrhoea, no spasms or cramps, as in the above remedies. The *collapse* of the early stage usually calls for CAMPHOR; the *vomiting* and *purging* for VERATRUM ALB.; the *spasms* or *cramps* for CUPRUM, and the *irritable asthenia* for ARSENICUM, but CARBO. VEGETABILIS comes to do the reactionary work, when these remedies have failed and life seems almost extinct. It corresponds exactly to the *asphyctic stage* of the disease. The *facies of Collapse*, so well marked in *acute general peritonitis* with its frequent small pulse, shallow rapid breathing, dyspnoea, hiccough, coldness of the extremity, circulatory failure and extreme prostration, form a syndrome which no drug can dispute to CARBO VEGETABILIS, especially if the intestinal paralysis allows a great accumulation of gas and the abdomen becomes tympanitic.

The affinity which CARBO VEGETABILIS has for the *venous capillary system* cannot be ignored in any disease exhibiting a *cyanotic condition*, with paroxysmal dyspnoea and stupor, for any degree of resistance in the peripheric capillaries (*venous stasis*) intervenes frequently in the production of *asystolia*, where we observe in its distressing course some of the most characteristic symptoms of this drug, namely, orthopnea anguish, cyanosis, algidity; small, irregular pulse, a pulse with false intermissions on the neck (*true venous pulse*), presystolic pulsations on the enlarged liver (*false hepatic venous pulse*), or systolic (*true hepatic pulse*); sonorous, sibilant, disseminated, rales in the lungs and finer, subcrepitant in the base of the left lung, as well as abdominal tympanism, visceral congestion and serous effusions. *Cyanosis* always arises from the presence of too much carbonic acid in the blood and this may be caused by interference either with the respiratory or with the vascular functions; hence two factors are necessary for its production—*venous and capillary engorgement*, and *mal-æriation of the blood* (imperfect hematosi*s*). CARBO VEGETABILIS, however, is not indicated in those extreme and persistent cases associated with *cardiac malformation*, where ACONITE and even RHUS TOX. has proved so beneficial, but in those occurring in *senile bronchitis*, *broncho-pneumonia*, *emphysema*, *pleuritic and pericardial exudations*, *valvular disease of the*

heart, cholera, abdominal disease with diaphragmatic pressure, paralysis of the diaphragm from peritonitis, spasm of the muscles of respiration, &c. In emphysema, as in tuberculosis and other chronic lung affections, a large number of capillary channels are closed, and in a large pleural exudation not only the lungs, but also the capillaries are compressed, acting in the same way as a hindrance to respiration. In many *asystolic crises* of great intensity, especially of the cardio-pulmonary type, I have seen a few doses of CARBO VEGETABILIS followed by a lull and relief quite grateful to the patient, and this when the *cardiac cachexia* was already pronounced and death from *asphyxia* or *collapse* seemed inevitable. In any attack of *asthma*, principally of the aged, or of the weak and poorly nourished, the complex of symptoms usually present corresponds closely to this drug, which should always be preferred if the anxiety, dyspnoea and cyanosis are attended by *flatulence*, with great relief from eructation. The cases of *asthma*, however, in which I have found this drug beneficial, are those provoked by damp weather, with an accessory and secondary catarrhal element, with a hemorrhoidal habit; or when due to bronchial, gastro-hepatic, or abdominal irritation; particularly in elderly, enfeebled people, who show no reaction to well-chosen remedies (SULPHUR), or too weak to move or to exhibit any restlessness, as in ARSENICUM. In cases due to abdominal irritation from accumulated flatus, it shares distinction with LYCOPodium, but it should have the preference when the patient is relieved by belching wind. Both remedies have deposit of red sand in the urine, indicating faulty metabolism, but LYCOPodium has a better record for aiding the elimination of uric acid, which is held to-day as an exciting cause of *asthma*. Moreover, after repeated attacks of *asthma*, we usually find the catarrhal element increased or permanent; and chronic bronchitis and emphysema probably established, and followed by bronchiectasis (fetid breath, and paroxysmal coughing with muco-purulent sputa) or by cardiac lesions. Eventually *asystolia* supervenes which is to the heart what a serious jaundice is to the liver or what uremia is to the kidney, and in such distressing conditions there are certainly enough respiratory and circulatory phenomena present to indicate CARBO VEGETABILIS, for as seen elsewhere paroxysmal dyspnoea, anxiety, trembling, cyanosis and impending collapse, are characteristic symptoms of this drug.

The slight *catarrhal troubles* in which we may employ CARBO VEGETABILIS, are provoked by a warm moist atmosphere, and attended by *loss of voice, a raw feeling down the larynx and trachea, and a dry, tickling, sometimes spasmodic cough*. I have obtained the most gratifying results by the use of this remedy in the *hoarseness and roughness remaining after inflammatory conditions of the larynx*, almost amounting to *aphonia*, and always aggravated by exposure to damp evening air, or from prolonged conversation. As in CAUSTICUM, PHOSPHORUS and SULPHUR the loss of voice is attended with a *feeling of painful rawness down the larynx and trachea*. In CARBO VEGETABILIS the *hoarseness* recurs regularly every evening, and may be associated with a dry, tickling cough. In PHOSPHORUS the *aphonia* advances with the day and is worse in the evening. In this remedy there is a great sensitiveness of the larynx, and, consequently, the patient dreads coughing and shuns talking, which increase the pain. CAUSTICUM calls for cases which are worse in the morning, and in dry, cold winter weather. It is particularly suitable to *paralytic aphonia* (when not traceable to compression by tumors or due to surgical traumatism), or in the *hoarseness of singers and public speakers* (AUM. TRYPH., SELENIUM). It is the only remedy I know which has relief from cold drinks. SULPHUR is indicated in *chronic hoarseness*, which comes usually in the morning and follows well CARBO VEGETABILIS and CAUSTICUM, when these remedies fail. CARBO VEGETABILIS is also complementary to DULCAMARA, when the acute symptoms subside and the cracked voice reappears every evening.

We may accept as an universal rule that in all *affections of the respiratory tract*, calling for CARBO VEGETABILIS, incomplete hematosiis must always prevail, running from slight respiratory embarrassment up to an *orthopneic* or even an *asphyctic* condition. If the trouble settles in the *bronchial tubes*, and the patient is old or debilitated, the mucous lining of these passages become torpid, allowing a profuse accumulation of exudates, which becomes purulent and offensive and very difficult to raise. A condition similar, but not identical, to the one observed in children suffering from *capillary bronchitis*, where ANTIMONIUM TART. is usually the remedy; for the difficult sputa seldom undergoes such a putrefactive change. The *cough attending these catarrhal troubles* is either dry and painful, or

spasmodic; in short hard spells, or difficult, with offensive sputa. It is aggravated by talking, cold air, or by going from a warm room into a cold one. In all these cases, however, it is not so much the age, the dry cough, the mucous rales and the bruised feeling in the chest and ribs that indicate CARBO VEGETABILIS, but the occurrence of *emphysema and bronchiectasis* where, of course, the paroxysmal cough with abundant expectoration often ejected with much difficulty and generally very offensive, are the chief symptoms. We should bear in mind, while treating these cases, that the right heart may become hypertrophied and dilated, as seen in the centric epigastric pulsation. It has proved helpful, when *pneumonia* is complicated with affection of the right heart, or in *emphysematous patients* with old *bronchial catarrh*. We may even have to prescribe this drug in *phthisis pulmonalis*, when the hard spells of cough do not cease until masses of purulent, fetid sputa are discharged, leaving the patient exhausted and in a condition akin to collapse.

CARBO VEGETABILIS has also shown its value as a remedy in the treatment of *digestive troubles*, traceable to the abuse of salt or salt meats as well as fat in general, ice cream, milk, ice water and flatulent vegetables; and productive of much *acidity, fermentation and gaseous distension*. It is a capital remedy, when the distension interferes with breathing, keeps the patient awake during the early part of the night and is readily relieved by eructations of a rancid taste, or the escape of gas from the bowels. It is no less valuable in *chronic ailments of the digestive organs* occurring in individuals debilitated by intemperance, high living, insufficient nourishment, or by loss of fluids, or following acute disease. It is indicated in *atonic or fermentative dyspepsia*, when the plainest food disagrees, milk turns sour in the stomach, gases form in abundance and the patient dreads to eat because of *burning pains in the abdomen*. CARBO VEGETABILIS covers also those *chronic cases* which are usually attended by *drawing, crampy pains* supervening a few hours after the evening meal, associated with pyrosis, sour eructations, thirst, vertigo, palpitations, short breath, and which, neglected, may terminate in *chronic catarrh or dilatation of the stomach*. *Dilatation of the stomach*, however is more frequently the cause of *dyspepsia*, than dyspepsia the cause of dilatation (Bouchard). In such cases, the age of the patient and

rapid loss of flesh may suggest *cancer* and *chronic ulcer*, but only the detection of the tumor and the occurrence of *pain*, *tenderness*, *vomiting* and *hematemesis* could confirm the disease. In *alcoholic* and *cardiac subjects* we often observed a *chronic gastritis* due to alterations of the stomach-walls; and in this affection, as in *dilatation of the stomach* (the result of primary paresis of the contractile element which hinders the stomach to struggle against the causes of distension) this drug may render some good service, *especially in toppers or gobblers*, in whom *simple atony* or *myasthenia* are so common. The most striking mechanical symptom is *embarrassment of the breathing* by upward displacement of the diaphragm, while attacks of palpitation, irregularity of the pulse, nocturnal asthma, disturbed sleep and vertigo are common *reflex phenomena*. In a case of *enteroptosis* in a woman tippler, with pendulous abdomen, meteorism, distress and pain after food, and a *feeling as if the abdomen was hanging heavily*, a few doses of CARBO VEGETABILIS brought the patient regularly to my office, and against my advice the operation was given up. The supporting belt, which usually affords relief, could not be endured after the first meal of the day, for it produced, first, nausea and eructation, then vomiting and pain. This drug is also one of our best remedies for the *gastralgia of wet-nurses or of nursing mothers*, who are debilitated by improper or insufficient food, or by prolonged lactation.

Butiric acid fermentation, in which CARBO VEGETABILIS is complementary to PULSATILLA, is caused by the excessive ingestion of fatty food, especially by those whose powers to digest fat are weak, either from old age, chronic dyspepsia or in the consummate toper. In the *dyspepsia of drunkards*, CARBO VEGETABILIS is also complementary to SULPHURIC ACID, the former points more to putridity and flatulence, the latter to acidity. OXALIC ACID and LACHESIS have also putrid, offensive stools, and have been employed with success in this class of patients. I have prescribed CARBO VEGETABILIS with good effect, not only in *chronic dysentery*, with burning pains, meteorism, slimy putrid stools, great debility and tendency to syncope, but in the *diarrhœa of ptomain poisoning, due to spoiled fish*, with anguish, nausea and flatulent colic. In *gastric derangement* due to chilling of the stomach with ice water, when overheated, I think it is inferior to ARSENICUM.

The appropriateness of CARBO VEGETABILIS to *digestive disorders*, arising from the abuse of salt or salt-meat, has led to its employment in *scurvy* a disease whose leading characteristics are: General loss of power, multiple hemorrhages, putridity and a special alteration of the gums. It corresponds to the *second and third stage of the disease*, for there is developed *sepsis* in many of the diseases in which this drug is the remedy (FARRINGTON). The syndromes of these stages comprise the following symptoms of this drug: 2nd. *Swelling, receding and bleeding of the gums, multiple hemorrhages* (nose, mouth, lungs, stomach bowels), *ecchymosis; ulcers, livid, easily bleeding, with fetid, corroding scanty exudate*, and *increasing dyspnoea*. 3rd. *Advancing adynamia, alidity, cold sweats, bloody, offensive diarrhoea, asphyxial spells, cardiac alterations and tendency to syncope*. Other degenerative changes due to *alteration in the state of the blood*, in which this drug has proved serviceable, are: *Sanguineous effusions* in the shape of red or blue patches, which do not disappear on pressure (*purpura*), or in the form of small spots (*petechiae*) or of larger ones (*ecchymosis*). In *purpura* it is indicated, when the depression of the nervous strength has become extreme, and the asthenia and cardiac failure, alarming. In *purpura hemorrhagica* is called for, when the extravasations of blood are associated with great *prostration, alidity and cold sweats*. Moreover, when the normal metabolism of the tissues is not under the absolute control of *trophic nerve influence*, through unfavorable conditions, we may have as a result certain changes in which we have found this remedy helpful, and this has been especially the case not only with *chronic bed-sores*, due to overpressure, bad nursing and lack of cleanliness, but with *acute trophic ulcers* (decubitus, eschars) which may develop during prolonged nervous illness, even when every attention is paid to the avoidance of pressure and other unfavorable conditions. There is another *trophic and vasomotor trouble*, for which this drug has also been recommended, namely, *senile gangrene*, which is dry, involves the extremities of feet and hands, and has an ascending course, and violent burning pains. This *trophic change* is due to a diminution or cessation of vitality, especially in the lower limbs, as well as to sclerosis of the arteries in the aged. States of lowered vitality are frequently associated also with *carbuncle*, which is a multiple boil, with

rapid sloughing and evacuation of pus and necrotic masses through the various openings formed. Here the lividity of the parts, the offensive discharges and the burning pains indicate this remedy, which should also be used externally to correct putrefaction. It follows well after RHUS TOX., ARSENICUM, LACHESIS and even ANTHRACINUM, *when the torpidity is great and the adynamia increasing.*

Other *vascular disorders*, in which CARBO VEGETABILIS has been efficacious, comprise those due to obstruction or venous stasis, as *hemorrhoids* and *varices*, and those dependent upon congestion, alteration of the blood or of its vessels, rupture, &c., as *hemorrhages*. In *hemorrhoids*, it is indicated when the tumors protrude, are livid and attended with *burning pains* and *flatulence*, particularly if they are aggravated after a debauch and heavy drinking, or when during the intervals of severe attacks there is an *oozing of offensive humor* from the rectum. In *varicose ulceration* is one of our chief remedies for *torpid cases*, if the parts are livid, easily bleeding and fetid, and attended with burning pains. In fact, in all *ulcers of low type*, even *cancerous*, with burning pains, and ichorous, acid, offensive exudate, CARBO VEGETABILIS must be considered. In all *venous losses*, with *great debility* and respiratory embarrassment this drug is likewise indicated, especially if the effusion of blood is repeated or prolonged and there is a *tendency to syncope*. Even in *active hemorrhages* (nose, mouth, lungs, uterus, anus), with rapid sinking of the forces and *impending collapse* we often have to resort to this remedy.

SIGNIFICANCE OF THE PLICATED TONGUE.—According to Dr. Payenneville, the symmetrical, plicated tongue, called scrotal by public, is a congenital malformation. It constitutes a true dystrophia, associated almost always to others, among which the most frequent are the dental dystrophias. Besides its essential congenital character, is frequently found among other members of the family, and this during many generations. It is indolent, unless complicated with secondary pathological lingual localizations. It offers a soil of slight resistance, very favorable to all classes of infection, particularly syphilis, which is the most frequent. He thinks that hereditary syphilis should be considered its only cause, and when it enters into the pathogenesis of this affection, it is associated with other dystrophias, and especially with arthritism. This lingual deformity should be recognized at once to avoid serious errors. Those suffering from this trouble should be advised to be scrupulous with the hygiene of the mouth, in order to prevent infectious complications. After meals, they should not neglect to clean the tongue with a soft brush and some mild antiseptic, and finally they should discard as much as possible the use of tobacco.—*Revista Homeopatica*.

EDITORIAL

IN MEMORIAM.

THE death of Dr. Carl V. Vischer, the eminent surgeon, which occurred May 13th, 1906, came as a distinct shock to perhaps as large a circle of personal and professional friends as any similar calamity has done in Philadelphia.

His personal friends and *clientele* were by no means limited to Philadelphia; he made life-long friends wherever he went, and for a person of such marked ability and such firmness of opinion, perhaps no one ever made more or better friends.

He was not a man to be easily turned from his matured opinion; he wanted a reason for everything, but his mind was so broad, and his experience so extensive that he was never dogmatic for opinion's sake, and sought above all to do the greatest good to the greatest number. Like so many other great surgeons, he was a Philadelphian; he was Philadelphia born and bred, a graduate of Hahnemann College, a resident in the hospital, after which he pursued his studies in Heidelberg and Vienna for years, and was well acquainted with the leading authorities and their teachings and practice in Paris, Berlin, London and other great medical centres.

He came back well equipped, and his influence in Philadelphia was almost at once felt. He advanced in his profession with the most rapid strides; every new proposition in surgery was sifted, every new method studied out and attempted, if it offered any chance of improvement. His studies, as I personally know, were gigantic. It seemed to me that he was ever at it, and his laboratory down in his basement was to me a perpetual wonder.

He was the guiding spirit at St. Luke's Hospital; in fact, I was about to say, its founder; certainly its sustainer, until it has spread out into one of our leading hospitals, and it is so firmly planted now that its great future is assured. Few will have forgotten the ball-park accident, a few years ago, when St. Luke's was crowded with its victims, of whom almost all were saved.

At Hahnemann Hospital, too, he was one of the principal surgeons until his death, and I have watched with unalloyed pleasure his wonderful deftness and skill in operating. I can well appreciate a remark made to me at Dr. Vischer's funeral by one whom merely to name would bring universal assent, "that Dr. Vischer was one of the best operative surgeons I ever knew." He was also surgeon at the Wilmington Hospital, Delaware, and at the Trenton, N. J., Hospital; at State College, and at many other institutions his aid was eagerly sought, and never was denied.

He was always ready, nay, most anxious, it seemed, to take those cases which promised no commercial fee or reward. A large part of his practice was deliberately gratuitous, and in many cases he refused larger fees and accepted smaller ones in preference. I know of one case in particular, when a married daughter tendered him \$50 "to help her mother with her bill." The case was a long and troublesome one; the bill was \$250, and Dr. Vischer, without a word, brought her a receipted bill for the full amount in exchange for her \$50. "I thought she needed it," he said.

Work at all hours of the night was met with perfect alacrity. He had pre-eminently what Napoleon called "two-o'clock-in-the-morning courage." In his last long illness, brought on absolutely by his unselfish devotion to his duty, he operated and when he was taken away from the table he collapsed. A week before he took to his bed he went down Jersey and made a twenty-nine-mile drive in the rain to operate a case, without fee, but one of which he said: "The patient won't have anyone else."

Outside his profession he had one burning passion—it was love of Nature; the broad expanses, the mountain ranges, the forests, the streams, the changing skies. It has been said that no man who sincerely loves Nature is or can be bad. Dr. Vischer was not bad; he was pre-eminently good, good all through, and if he ever gave pain, he gave it to save pain. He has left a vacancy in Philadelphia surgery of every school or practice, which will long remain unfilled. Peace to his ashes!

HAHNEMANN'S NEW DEAN.

DR. C. M. THOMAS, having resigned the Deanship of the Hahnemann Medical College of Philadelphia, which position he has so ably filled during the past two years, Dr. H. L. Northrop was elected to be his successor at a faculty meeting, June 2, 1906.

Dr. Northrop is a graduate of the Hahnemann Medical College in the class of 1889. After a year spent as Resident Physician in the Hahnemann Hospital, of this city, he went into the office of Dr. C. M. Thomas, where he remained three and a half years. He afterward spent a year in the office of Dr. W. B. Van Lennep, meanwhile beginning his private practice.

The health of Dr. A. R. Thomas, who had been Dean of the College and Professor of Anatomy for something like forty years, being now in a decline, he requested Dr. Northrop to assist him in giving lectures on Anatomy, which led to his appointment as Associate Professor in that branch. Upon the death of Dr. A. R. Thomas in 1895, Dr. Northrop was elected Professor of Anatomy, a position which he has retained up to the present time. In addition to his regular lectures, it has been his custom for several years to give a course of illustrated lectures on Anatomy, making use of the stereopticon for this purpose. These lectures are in the nature of a review of the entire course on Anatomy. In 1904 he was made Associate Professor of Surgery, having held for some time the position of Senior Surgeon in the Hospital.

Since his election to the Deanship he has addressed a letter to the College Faculty and other instructors in which he expresses his deep concern for the welfare of the College, and his earnest determination to do all in his power to promote its growth and prosperity. That this resolve is thoroughly conscientious and that he will do his utmost to carry it out, will not be doubted by anyone. The responsibilities of the new position to which he is called will never rest lightly on his shoulders. Any failure on his part will not be a failure of intention. He invokes the hearty co-operation of his colleagues, and it is not too much to say that this he will loyally receive.

Dr. Northrop's youthful appearance does not detract from his dignity and self-command. Many humorous incidents are related of the surprise expressed at his apparent youth by per-

sons seeing him the first time. Easily approached by anyone who has any good reason for approaching him, he is possessed of those genial qualities which every person must have who would win the esteem and friendship of others. In a remarkable degree he has the confidence and good will of the alumni and of the entire body of students.

May every success attend the efforts of the new Dean to promote the prosperity and to raise the standard of "Old Hahnemann."

APPENDICOSTOMY: IS IT AN OPERATION WITH A FUTURE?

SOME years ago a prominent New York surgeon, whose name we do not recall, published an article describing a new use for the appendix. His report was based on a case in which he had brought the appendix out through an abdominal incision, stitched it to the abdominal walls, and, after healing had taken place, made use of the appendix as a means of thorough irrigation of the colon. To this operation the name of appendicostomy was applied. Originally it was intended to relieve or cure ulcerations of the colon and persistent inflammatory lesions of that portion of the intestines. In the few instances in which it was tried it was shown to be of value.

Recently, Laplace, of Philadelphia, has reported a case of epilepsy in which he made use of appendicostomy and subsequent colonic irrigation, basing his plan of action on the theory that the case originated in a toxæmia arising from the large intestines. Sufficient time has elapsed since this operation was performed to satisfy us that the measure proved curative, skeptical though we are as to reports of successful, *i. e.*, permanently curative, treatment of individual cases of epilepsy. Laplace has also operated in two other cases, but sufficient time has not elapsed to enable one to judge positively as to the permanent result.

Epilepsy is after all but a symptomatic syndrome, and not a disease. Although the symptomatic pictures of the attacks resemble each other closely, it is evident to any one who has had a large experience with the disease, that it must have a diversified etiology and pathology. In many cases, dietetic measures are of inestimable value. In others, attention to the bowels accomplishes much. In still others, dietetic measures do

absolutely nothing. That there are many cases in which auto-intoxication *via* the large intestine is the only cause, we are satisfied. That ordinary therapeutic measures intended to correct this evil often fail, is well known. In such instances, one is justified in resorting to such heroic measures as appendicostomy, because by it and the subsequent thorough colonic irrigation, one can attain as clean a state of the large intestine as is possible.

But epilepsy probably is only one of the conditions in which it is likely to be of avail with relative infrequency. We have all observed cases of intestinal auto-intoxication which have gone the rounds of the schools and the specialists. No other diagnosis is possible, and yet treatment is unavailing. This class includes many cases of neurasthenia, hypochondriasis, melancholia, etc. It is these people, we believe, who will receive benefit from the operation. We do not wish to be understood as advocating appendicostomy as a cure-all; far from it! It is an operation to be considered seriously as likely to prove curative in a goodly percentage of a class of cases which have hitherto proven incurable, and in which we are justified in trying anything within the bounds of reason.

AGGRESSIVE THERAPEUTICS.

THE condition of therapeutics during the last twenty-five years has been very unsatisfactory to the minds of scientific and practical physicians. The discovery of bacteria as a causative factor in many diseases overthrew most of the theories of disease upon which therapeutic measures had been formerly based. Likewise the introduction of more exact and more critical methods of investigation have proved the uselessness and even the harmfulness of many of the most cherished procedures of traditional medicine.

While no one can doubt but that the researches of modern investigators have been a great boon to the art of medicine, it must be borne in mind that the first effect of these researches was to destroy confidence in the formerly accepted methods of treatment, while, unfortunately, until very recently at least, they added but little to our therapeutic armamentarium. Thus, with the traditional teachings of the past swept away and

with nothing positively established to substitute in their place, it is but small wonder that the condition of therapeutics became little short of chaotic and that the great body of physicians became confused and sceptical.

In the midst of this confusion and scepticism physicians have advocated that measures which have been effective for centuries at the bedside in the healing of the sick and in the relief of suffering should be discarded. Some of the most eminent medical authorities of our day have rushed into public press stating that "there is no effective treatment for pneumonia"; "we can do nothing for typhoid fever"; "there is no medical treatment for tuberculosis"; "there are only four drugs that have any therapeutic value"; etc., etc.

What has been the effect upon the laity of this scepticism and widely published lack of confidence on the part of physicians in the methods which they employ in the treatment of the sick? Have the sick and suffering accepted these words of the medical authorities as final and quietly submitted themselves to the care of Nature? Not at all. People who are sick desire treatment, and if physicians are not prepared to do anything to help them they will go to some one else. Thus we see that there has grown up among the laity an indiscriminating prejudice against medicinal methods of treatment, and they are crowding to the ranks of the Christian Scientists, the Osteopaths, the Mechano-therapists and other faddists without number. As a result, the medical men who have been so persistently decrying their own measures have been relegated to the bacteriological laboratory or to the post-mortem room, while the faddists and charlatans are treating the sick and receiving large and remunerative fees.

The time has come when legitimate physicians must give this matter earnest consideration. If it is true, as all who consider the facts with an impartial mind must concede, that there are certain limits to the usefulness of drug therapeutics and that many pathological conditions which are not amenable to medicinal measures are curable by psychical, physical or mechanical methods of treatment, then it is our duty to utilize the beneficial effect of drugs in their proper sphere and to scientifically apply and utilize the effects of psychical, mechanical and physical methods of treatment in their proper spheres. The majority of physicians have been slow to make use of these

latter methods of treatment because they have been largely in the hands of charlatans and other incompetent persons. However, we must realize that aside from all the quackery and commercialism which has surrounded them in many instances there is a certain true worth in them, and if they have been productive of *some* beneficial results in the hands of persons who indiscriminately apply them to diseased conditions of whose nature they are utterly ignorant, there is every reason to believe that they would prove valuable additions to the therapeutic armamentarium of legitimate physicians if intelligently and scientifically applied in their proper spheres.

In a recent article entitled "The Renaissance of Therapeutics," published in the *Journal of the American Medical Association*, Dr. Richard C. Cabot demonstrates very clearly the fact that physicians have been content long enough to remain in the background and confine their energies to the prescribing of pills, and shows that there is an awakening among medical men to the fact that their field of useful activity need not be so limited. "The last great wave in therapeutics," Cabot says, "developed in the sphere of surgery." Beneficent as it has been, we must realize that the proper field of surgery is comparatively limited and, as Cabot adds, not more than one-tenth of the sick people are capable of being benefited by surgical measures. The other nine-tenths must be treated by other methods. In other words, nine-tenths of all sick people are outside of the proper sphere of surgery and must be treated by legitimate physicians or turned over to charlatans.

Of the therapeutic methods at our command for the treatment of these patients we have medicinal, dietetic, hygienic, physical, mechanical and psychical measures. In this list drugs occupy a very important place. From time immemorial man has intuitively made use of medicinal agents in the treatment of disease, and their beneficent action when applied in accordance with scientific laws by competent persons is beyond all reasonable doubt. The widespread scepticism which prevails among many people to-day regarding the usefulness of drugs, is the result of their injudicious use in and out of season rather than to any fault of the drugs themselves. It is essential to remember that drug agents are not universally applicable. They have their sphere, outside of which they are useless. To use the words of Cabot, "Drug therapeutics in cases in

which drugs do no good represent either mental fatigue or mental myopia on the part of the physician."

Thus there has been a growing tendency during the past decade to develop therapeutic agents which are adapted to those forms of disease in which medicinal agents have little or no effect. The more important of these new therapeutic agents include the proper use of air, water, food, massage, heat, cold, pressure, electricity and photo-therapeutic measures. The efficacy of many of these measures in their proper sphere is beyond doubt, and it has become very essential that the up-to-date physician should be familiar with their methods of employment and their field of utility.

Unfortunately, the medical schools of our country have failed to properly instruct their students in these newer methods of treatment and there is no doubt but that the physicians of America have not been educated up to the scientific and effective application of physical agents that has been attained abroad. The reason the average physician fails when he attempts to utilize any of these methods is that he lacks that intimate knowledge of the finer details of the treatment upon which its effectiveness largely depends. We do not have time to bother, as we say, with these things, and though we may be aware that there is little chance of benefit being derived from drugs in a particular case, we continue to administer our remedies or a placebo in hopes that Nature may bring about a spontaneous cure in time. At last our patient becomes disgusted and consults some unlicensed practitioner of physical methods of treatment, who may perhaps, even without an accurate knowledge of the disease which he is called upon to treat or of the scientific method of applying the measures which he uses, rapidly bring about a cure, much to his own advantage and to the discredit of the medical profession. Incidentally, also, it may be remarked that the legitimate physician receives a fee of fifty cents per office visit from the patient, while the irregular practitioner receives from the same individual from three to five dollars per office visit. And the medical profession are still wondering how it is done.

This state of affairs should not long exist, for the remedy is simple. Legitimate physicians must add to their medical treatment a practical working knowledge of those physical and psychical methods of treatment which have been proven of

clinical value, and either administer themselves in proper cases or turn them over to physicians who have made special study of these methods and who they know will administer them scientifically and conscientiously.

The following conclusions which Cabot has formulated regarding the present condition of therapeutics deserve the serious consideration of every progressive physician:

1. Therapeutics has become within the past few years very noticeably more effective.

2. This increased effectiveness is the result of (a) the aggressive spirit as exemplified by the work of the New York Board of Health in school hygiene and school inspection, and by the tuberculosis work now being carried on in Boston; (b) the greater part now being taken by the laity in medicinal work, both by intelligent co-operation and by financial support; (c) our greater acquaintance with physical therapeutics, especially with the details on which their successful application depends; (d) the rise of scientific mind cure and of social work, marking a recognition of the psychical and of the social elements of all disease; (e) a wider utilization of the unique talents of women in the field of therapeutics.

3. With the rise of the type of therapeutics here described we are now witnessing a limitation of the sphere, both of surgical therapeutics and of drug therapeutics. The latter limitation will do much to undermine the superstition upon which the "patent-medicine" superstition rests.

SAN FRANCISCO NEEDS EVERYBODY'S HELP.

THE sad straits of the physicians of San Francisco are evident to everybody, and yet, notwithstanding the numerous appeals that have been sent out, and the liberal responses by many physicians, there is still need for even more substantial assistance. The situation, in brief, is this: We have about seventy-five physicians practicing in that city. Practically all of them have lost their entire office outfits, including valuable papers, diplomas, libraries, etc. Some of them have gone to other parts, rather than wait for the time to arrive when conditions in the stricken city shall have reached the state in which the physicians can be self-supporting. Some few are sufficiently well fixed financially to weather the misfortune without

assistance from others. There probably remain about fifty of our physicians who are utterly destitute, some of them with families and others advanced in years. What this means to a doctor, those of us who have had a hard time getting into practice must fully appreciate. Widespread efforts have been made to raise sufficient funds to give these physicians a new start in life. Of course, their old patients will stand by them; but it will be many a day before their clientele will be in sufficiently good circumstances to remunerate them substantially. In the meantime, they must live and renew their office outfits.

Thus far numerous cities have started subscription lists to help the unfortunate. Philadelphia has collected \$1,680. How much has been contributed by Pennsylvania we know not. We have been informed that Allegheny county, with its customary liberality, has responded liberally. New York State is credited with about \$2,000, and Massachusetts is reported as having given about \$1,500. This makes about \$5,000, in addition to what has been or will be collected from the rest of the country.

We believe that there should be collected an average of \$5 for each physician in the country. Every man can and should give something. Those who have been blessed by prosperity should and must give liberally. Therefore we think that our estimate of what should be done is not too great. In other words, the homœopathic physicians of America should contribute \$50,000 for the rescue of their suffering brothers in San Francisco. Large as this sum may seem to many, it is by no means enough for needs. Philadelphia physicians have averaged a little over \$4 per head. Those of New York State about \$2 per head. Every one of our communities can and must do better than this.

The old school physicians, judging from the reports at hand, seem to be blessed with very tight purse strings. We understand that their total contributions to date amount to but a little more than \$11,000. They should raise half a million if they average \$5 per head. One State, the name of which we do not mention for fear of giving offence, averaged but 33 cents per head in this fund. At least it was so stated at the annual meeting of the State Society.

No matter how prosperous or otherwise we may be, we

must realize that widespread calamity may befall our own communities. Chicago, Galveston, Portland, Johnstown and, lastly, San Francisco, have suffered. New York, Boston, Philadelphia, St. Louis, Denver and other large cities are not immune. Let every reader who has not contributed to the good work make good his dereliction at once. Dr. J. C. Wood, whose office is in the Rose Building, Cleveland, Ohio, is the representative of the American Institute of Homœopathy for receiving the funds.

But we need not wait to give money. Books are wanted. Dr. J. W. Ward, of San Francisco, writes us that homœopathic books are badly needed. So if any reader has duplicate *materia medicas*, or other works which are not necessary to himself, let him send them to Dr. Ward, or to the Hahnemann Medical College of Philadelphia, which is acting as a collecting centre and is now engaged in getting down its duplicate volumes for the needy physicians.

We feel that the work of helping San Francisco has been bungled from a medical standpoint. One foolish thing that was done was to rush a lot of physicians and nurses to the city, when there were already a sufficient number on the ground. Such a course must make the sufferings of the resident medical profession worse than before.

Again, there has been a lack of system in making the collections. Philadelphia organized for the work. Allegheny county is always organized for anything; hence it lived up to its reputation. We believe that the national association should take steps to appoint a standing committee that will have full authority to act should any community be visited by widespread calamity. Let this relief work devolve upon the executive committee or the committee of organization, registration and statistics, or let it be specially appointed; but let us have the organization which will take up the work when charity is needed.

Let us appeal to our readers to give according to their ability, but let everybody give; if not money, then medicines, books, instruments, supplies, etc. **BUT GIVE AND GIVE AT ONCE.** IF IT BE A SMALL SUM, VERY GOOD; IF IT BE A LARGE ONE, STILL BETTER. **BUT ALL GIVE.**

GLEANINGS

THE LEUCOCYTE FORMULA IN PERTUSSIS.—F. S. Churchill has studied the lymphocyte increase in whooping cough and reviews the literature. In 36 cases leucocytosis existed in all but one. Differential counts showed a lymphocytosis in 30, and in 15 out of 16 patients examined in the catarrhal stage. The significance of a high percentage of lymphocytes is of course greater as the child advances in years. His conclusions are as follows: 1. A general leucocytosis is present in almost all cases of whooping cough. 2. A lymphocytosis, i. e., an increase in the number of lymphocytes, is found in about 85 per cent. of cases at some time during the course of the disease. 3. A lymphocytosis is found even more constantly during the early or catarrhal stage, over 90 per cent., showing the phenomenon at this stage. 4. A lymphocytosis is found usually in those conditions difficult to diagnose from whooping cough. 5. The presence of a lymphocytosis in a child with a hard persistent cough is a factor of great diagnostic value. It is also of prophylactic importance, inasmuch as it can be utilized to prevent the spread of the disease by leading to the prompt isolation of the patient. 6. The child's age must be taken into account in estimating the importance of the lymphocyte percentage.—*Journal American Medical Assoc.* May 19, 1906.

G. MORRIS GOLDEN, M. D.

DIAGNOSIS OF RENAL FUNCTIONS.—Cabot, in *New York Medical Journal* of May 12, 1906, states that functions, and not histological appearances, are what we should strive to recognize in kidney disease. Albumin and casts alone never prove the existence of nephritis. They may or may not accompany it. The physical characteristics of the urine, the visceral evidence of uræmia, dropsy and cardiac involvement are, with time, the best help to the functional diagnosis of kidney disease. The dilution test, the concentration test, and if opportunity offers, the quantitative estimation of the capacity of the kidneys to excrete particular substances may render valuable assistance. He particularly recommends a very simple test, which seeks to determine whether and to what extent the kidney is injured to secrete a dilute urine after a profuse ingestion of fluid, or a concentrated urine when liquid is withheld. In the early stages of acute renal insufficiency, the kidney often loses for the time the power to secrete a dilute urine. On the other hand, in some cases of chronic interstitial nephritis the kidney continues to secrete a dilute urine, even when water is considerably restricted.

G. MORRIS GOLDEN, M. D.

SERUM PROGNOSIS OF TUBERCULAR PLEURISIES.—P. Courtmount has investigated the agglutination reactions of blood serum and of the pleural

exudates in tuberculous pleurisy. He finds that the prognosis of tuberculous pleurisy with effusion is favorable according to the intensity of the agglutinating power of the pleural liquid, and grows worse with the diminution or absence of this reaction, which increases as recovery progresses, and diminishes in fatal cases as death approaches. His conclusions are as follows: 1. The mortality is about 25 per cent., in cases with agglutinating power of the pleural effusion, and about 75 per cent. in those in which this is absent. 2. In patients with agglutinating effusion the ratio of recoveries is large in proportion as the agglutinating power is high. 3. One can see the agglutinating power increase as the case progresses toward recovery and vice versa. 4. These facts support what has been held concerning typhoid fever, viz., that the agglutinating reaction is a reaction of defense, or at least goes parallel with the reaction of resistance of the organism. It is in general in inverse proportion to the gravity of the disease and in direct proportion with the intensity of the resistance. 5. The study of the agglutination in tuberculous pleurisy leads to important prognostic conclusions.—*Journal American Med. Assoc.*, May 19, 1906.

G. MORRIS GOLDEN, M. D.

THE LENHARTZ TREATMENT OF GASTRIC ULCER.—As satisfactory as is the rest treatment of gastric ulcer, there are many cases in which it has proven futile. In 1901, Prof. Lenhartz suggested a concentrated egg-albumin diet as a more rational method of treatment. His suggestion was based upon the theory that gastric ulcer is perpetuated by the associated hyperchlorhydria, and that egg-albumin is the most efficient food that will bind the free hydrochloric acid and neutralize the hyperacidity. The following is the tabulated management at the Eppendorfer Krankenhaus, as outlined by Haberman, of Hamburg:

Absolute rest in bed for at least four weeks. All mental excitement to be avoided. An icebag is placed upon the stomach, and kept there continuously for two weeks. This prevents gaseous distention, prompts contraction of the gastric walls, thus tending to obviate hemorrhage, and eases the pain when present. On the first day, even where a hæmatomesis has occurred, the patient receives between 200 and 300 c.c. of iced milk, given in spoonfuls, and two to four beaten eggs. At the same time bismuth subnitrate is given twice or thrice daily, 2.0 gm. at a dose, and is continued for ten days. The eggs are beaten up entire (with a little sugar) and the cup containing them is placed in a dish filled with ice, so that they remain cold. Sometimes a little wine is added. This food at once binds the supersecreted acid, and therefore mitigates the pain rapidly and causes the vomiting, often quite troublesome, to cease. The allowance of milk is increased 100 c.c. daily, and at the same time, one additional egg is given so that at the end of the first week, the patient is taking 800 c.c. of milk and six to eight eggs. Both these foods are now continued in the same amount per day for another week. No more than one litre of milk a day is allowed at any one time.

"Besides milk and eggs, some raw chopped meat is given from the fourth to the eighth day on, usually the sixth; 35 gm. per day in small divided doses (easily stirred up with the eggs or given alone), the day after 70

grm., and later possibly more if well digested. The patient is now able to take some rice or greisbrei, well cooked and a little zwiebach (softened). In the third week, quite a mixed diet is tolerated, the meat now being given well cooked or lightly broiled. All heavy foods are, of course, interdicted as well as vegetables with husks, etc., and those tending to produce flatulence. At the same time the patient is given orders to masticate his food thoroughly."

In a series of 135 cases treated by the Lenhartz method, recurrence was noted in but eight per cent. of the cases, and but three deaths. The majority of cases were dismissed as cured before the eighth week. A method of treatment giving such results is worthy of serious professional consideration.—*Medical Record*, June 16, 1906.

DIAGNOSIS OF RENAL CALCULUS.—The diagnosis of renal calculus presents many difficulties. As the author remarks in his conclusions, quoting from Israel, "a schematic text-book clinical picture" must not be looked for in this disease, and, as he states in his introduction, the actual symptoms met with are in no way proportionate to the size of a stone, or to the length of time it has been present. Furthermore, he points out the importance of differentiating suspected cases of renal and ureteral calculus from other diseases of the kidney, the more common of these being tuberculosis, pyelitis, pyelonephritis, and pyonephrosis, tumor and intermittent hydronephrosis.

The most important feature in differentiating lithiasis from tuberculosis of the kidney is a careful study of the urine, the finding of tubercle bacilli in the urine, and the results of animal inoculation. The presence of pus or blood may be common to both, but there is frequently a large amount of epithelium in the urine, in cases of calculus. The presence of sand or gravel are of course valuable signs. The wax-tipped ureter-probe and the X-ray are frequently also of great service, but either or both may fail at times. Pain and the presence of a renal tumor are not characteristic, but palpation of the ureter is of more value, as the ureter is usually thickened in tuberculosis. This is, however, true also of infected stone cases. In making a diagnosis of tuberculosis on the finding of tubercle bacilli in the urine, he points out the importance of differentiating from the smegma bacillus. It may be impossible, he finds, at times to differentiate infected renal lithiasis from pyelitis, pyelonephritis, or pyonephrosis, except at operation, in so far as the presence of a stone may cause any one of these conditions, and on the other hand, the formation of a stone may be caused by such an infectious process. In the differential diagnosis between stone and tumor of the kidney, he has found considerable difficulty. Here, again, he places great dependence upon careful urine examination. He points out, however, that a small stone, blocking the ureter, may cause marked swelling of the kidney, and be associated with blood and an absence of pus in the urine. In connection with intermittent hydronephrosis, he points out that a movable kidney, with sudden kinking of the ureter, may bring about attacks of pain very similar to those of renal colic caused by stone. In both conditions there may be blood in the urine. The diagnosis would, however, be cleared up by finding the kidney misplaced during the time of the attack (Dietl's crisis). In addition to the above diseases of the kidneys, he

calls attention to diseases of some of the neighboring organs, which must be considered in a differential diagnosis of renal calculus, that, owing to the proximity of the gall bladder to the right kidney, diseases of these two organs must frequently be differentiated. Besides the careful study of the urine, and the location and distribution of the pain, the author recommends Kelly's plan of catheterizing the right ureter, forcibly injecting some sterile fluid into the pelvis of the right kidney and noting whether the pain produced by this procedure is the same as that complained of by the patient during the attacks. In differentiating renal calculus or ureteral calculus from appendicitis, he points out that where a stone lodged in the ureter at the brim of the pelvis, there may be pain and tenderness located almost exactly under McBurney's point, and that, on the other hand, an inflamed appendix reaching over into the pelvis may cause rectal or bladder symptoms, or peri-appendicular tenderness, and thickening may, on palpation, simulate a stone in the ureter. The urine, although usually the safest guide, may prove negative. Intestinal obstruction and pancreatic calculus, causing colic, are also conditions which must be considered in diagnosis of ureteral calculus. Finally he mentions Henoch's purpura and angio-neurotic edema, and their accompanying gastrointestinal crises and hæmaturia, as conditions which might lead to confusion.—G. L. Heumer, *Journal Amer. Med. Assoc.* XLVI. 1906.

THE TREATMENT OF ACUTE AND CHRONIC GASTRO-ENTERITIS IN CHILDREN WITH BUTTERMILK.—Elie Wecherf (*Archives de Med. des Enfants*). The author advocates the employment of buttermilk in children having gastrointestinal disease. The variability of its action, mentioned by certain observers, is accounted for exclusively by the preparation of the liquid. Some permit the milk to become strongly acid, and add no water, or only a little water, in the butter-making; whereas others proceed in the opposite manner. The time also, during which the sour milk is churned, is of importance for the quality of the buttermilk, and it should amount to about two hours, in order to obtain a fair quality. Moreover, the acid fermentation must not be too far advanced, since a high percentage of lactic acid has an unfavorable effect upon ailing children. After the butter has been obtained, the buttermilk is further mixed with water, in a proportion of 6.4, and thus constitutes (of course only when perfectly fresh) an excellent food and remedy for children suffering from acute or chronic diarrhœa. The author likewise obtained remarkable results in severe cases of cholera infantum, with the exception of a single case. He also observed children with whom neither woman's milk, nor sterilized, maternized, or pasteurized milk would agree, thriving splendidly under buttermilk. For marasmic and rachitic infants also the employment of buttermilk is advisable, as well as in intestinal auto-intoxication, since buttermilk exercises a destructive action upon the micro-organisms of the bowels.—*Med. Rev. of Reviews*.

THE MEDICINAL AND DIETETIC TREATMENT OF CASES OF HEPATIC DISEASE.—Richardson, (*Medicine*, Jan., 1906), states that sodium glycocholate in doses of 15 grains per diem stimulates the liver cells, increasing the flow of bile, thereby removing accumulated waste products, especially bilirubin.

In cases with the icteroid coloration of the skin it will clear up the complexion in a few weeks. Especially is it indicated in hepatic colic; many cases are on record in which its continued use has prevented the attacks of colic permanently.

The diet in diseases of the liver is of great importance, the guiding principle being to obtain the maximum amount of nutrition with the minimum amount of physiological work, thereby giving rest to the organ. Proteids are necessary for proper nutrition, but in much smaller quantities than generally taken. The products of proteid metabolism—urea, ammonia, uric acid, creatinin, etc.—are more or less toxic and entail considerable physiologic activity on the part of the liver as well as upon the kidneys in their elimination. Fats are for the most part absorbed by the lymphatics, only a small quantity entering the liver by way of the portal vein; except in the suppression of the biliary secretion the easily digested fats, such as cream, butter, and the vegetable oils, are well borne in moderate quantities. The carbohydrates give but little work for the liver, their end products being principally carbon dioxide and water, both of which are easily eliminated.

The diet in hepatic insufficiency and hyperactivity should be moderate in quantity with a minimum of proteid, say about 6 grammes of nitrogen per day, with some little fat administered in the form of cream, fresh butter, or olive oil, and sufficient carbohydrate to bring the total diet to about 10 calories per kilogramme of body weight. The meat should be well cooked, preferably red meat, white meat containing more nuclein; gelatinous dishes, as calves' head and feet, etc., are to be avoided. Boiled fish, avoiding those containing much fat, are allowed, but shell-fish are debarred. One, or at the most two, eggs a day may be given, except in gall-stone cases, when the cholesterin contained in the yolk may cause increased elimination by the bile. This is, however, very doubtful. Experiments seem to prove that cholesterin is not absorbed from the intestine as such. Milk, the diet usually prescribed, is not satisfactory and should never be given except with desserts. Fresh cheese may be given and is sometimes well borne, but only in small quantities. Of vegetables, peas, beans, scorzonera, salsify, and salads are the best; spinach and tomatoes contain too much oxalic acid. Vegetable diet increases the alkalinity of the plasma and often relieves the constipation, producing bulky stools. Vegetables containing sugar are only tolerated in small quantities, with the exception of Irish potatoes, which should be well boiled and washed with butter. Toasted bread may be given, but pastry is forbidden; ripe or cooked fruits may be given sparingly. Water or very weak tea are the best drinks; the water should preferably be distilled, in which antisclerosis tablets (four to the pint) have been dissolved, this assisting in the elimination of the waste products. The total fluid taken in the twenty-four hours should be at least 1500 cubic centimeters. In some cases all the meat should be boiled so as to dissolve out the extractives; no soups or broths should be taken. Probably more than anything else the reduction in the quantity of the food is the greatest therapeutical agent, most patients being, or having been, great meat eaters.

THE TREATMENT OF TUBERCULOSIS BY LIME SALTS.—M. Paul Ferrier, of

Paris, recently read an interesting report before the Société Médicale des Hospitaux, on the treatment of tuberculosis by recalcification. He was led to this method of treatment by the observations that patients who were cured showed pronounced calcification of the teeth; that post-mortem examinations of cured cases showed the lesions to be calcified, and that phosphaturia was found at the onset of the disease, and in the predisposed. Phosphaturia and decalcification being synonymous, Ferrier assumes that only an acid or an acid salt is capable of dissolving the lime salts out of the teeth or bones. Among the possible sources of these acids he enumerated hydrochloric, phosphoric and sulphuric acids, the organic acids taken in fruits, and those formed in the stomach by fermentation. He considers it easy to prevent the ingestion of acids by patients, but finds it more difficult to prevent acid fermentation in the stomach.

The system of treatment which he has employed is as follows: He administers a glass of water containing a strong percentage of calcium carbonate a half hour before each meal. In addition he gives six grains each of the carbonate and tribasic phosphate of lime with five grains of sodium chloride with or after each meal. He forbids acids in any form, and lays stress upon the fact that the meals must be taken at rather long intervals in order that the stomach may thoroughly empty itself.

As a result of this method of treatment he stated that gastric fermentation is stopped, the digestive powers are restored, and blood regains its coagulating and plastic properties, and lung lesions in the first and second degree are rapidly and favorably modified.

When the stomach is incapable of transforming into the chloride a sufficient quantity of lime salts, it is necessary to administer the calcium chloride already formed. In the discussion which followed the reading of Dr. Ferrier's paper, several clinicians reported excellent results had been obtained by them from this method of treatment.—*British Med. Jour.*, April 14, 1906.

TREATMENT OF TETANUS BY MAGNESIUM SULPHATE INJECTIONS.—S. Logan, in the *Journal of the American Medical Association*, May 19, 1906, reports two cases of tetanus treated by the method suggested by Dr. S. J. Meltzler, which is by the use of an injection into the spinal canal of a 25 per cent. solution of magnesium sulphate in the proportion of 1 c.c. for every 25 pounds of body weight. Though neither patient recovered, in one of the cases the convulsive phenomena were strikingly reduced, in the other case the magnesium solution seemed to have little effect, which was attributed to insufficient dosage.

In closing he calls attention to the following points: 1. The evident sedative effect of the drug on the motor tracts of the cord. 2. The interference with respiration, which was the only annoying feature of the treatment. This was relieved in the first case, and the respiratory function was the last to fail. 3. The complete relaxation of the muscular system, which is out of the ordinary course of events in tetanus. He thinks it possible that we are likely to overestimate the convulsive features of the disease, and not to consider sufficiently the importance of neutralizing the toxins. The treatment is only a palliative one, but, as such he believes it deserves a further trial and investigation.

G. MORRIS GOLDEN, M. D.

THE CHEYNE-STOKES PHENOMENON IN ACUTE CEREBRAL COMPRESSION.—In this paper Wilfred Trotter cites cases to show that in acute cerebral compression the Cheyne-Stokes phenomenon is not a terminal manifestation, but an important diagnostic group of symptoms.

The four chief factors in this group are: (1) Periodic respiration. The change from hyperpnœa to apnœa may be abrupt. (2) Variations in pulse rate and strength and in the blood pressure. Increased strength of the pulse during the hyperpnœa is the most important feature. (3) Variations in the size of the pupils. The pupils dilate just before or at the onset of hyperpnœa. (4) Variations in consciousness. In the author's experience the patients have always been unconscious and the decrease in the profundity of unconsciousness during hyperpnœa has not reached complete consciousness. They display restlessness and certain peculiar movements of the limbs, and, rarely, a paralytic manifestation, such as conjugate deviation of the head and eyes, may for the time disappear. The periodic return of function is associated with a fixed result, so that during each period of hyperpnœa a complex and stereotyped series of movements occurs. The movements have the appearance of being voluntary and are such as might be expected to be habitual. They are, however, performed through hundreds of repetitions in an exactly similar order and with an unvarying preciseness of reproduction. A very important fact is that when a part of the brain is involved to the extent of producing anæmia and therefore paralysis of the limbs supplied by that region, such limbs will not be moved during the hyperpnœic periods. As already stated, it is only in rare cases that a true paralytic symptom during these periods. The onset, then, of a hemiplegia can be watched by noticing the gradual cessation of the cheyne-Stokes movements in the limbs involved, while those of the opposite side continue to move strongly.

Certain modifications of the classical type of the phenomenon are very common. Any one, and quite often more than one, of the factors may be absent. The pupil changes are perhaps the least constant; the respiratory periodicity is quite often absent, especially in the earlier phases of the case. The periodic movements are probably the most constant feature.

The value of the phenomenon in diagnosis is perhaps its greatest importance. In the first place, it affords certain evidence of severe compression of the brain and of implication of the bulb which, if left unrelieved, will surely cause death. It is not, however, an immediately terminal symptom, for it may persist for many days and it indicates a modified functioning rather than a paralysis of the medulla.

Secondly, it may give rise to difficulties in diagnosis through the periodic movements will be absent from a hemiplegic side; it is therefore obvious movements being taken for evidence of focal irritation. As already stated, that if the movements be taken as pointing to a focal irritation the side of the less advanced compression will be operated on.

The third point of diagnostic interest is the fact that it may reveal the presence of a paralysis otherwise unsuspected or in need of confirmation. It may be stated definitely that if the Cheyne-Stokes movements are present and a limb does not participate in them, that limb is paralyzed.

Two cases are quoted which bring out the characteristic symptoms of the

phenomenon, and the pathology of the condition is discussed.—*The Lancet*, May 19, 1906.

J. D. ELLIOTT, M. D.

THE ULTIMATE RESULTS OF KIDNEY FIXATIONS.—Carstens selected all the cases which he has operated since July 1, 1901, in which the kidney was apparently the only trouble, and sent a circular letter to each of them and to the family physician. The following questions were asked:

1. Has the kidney remained in place?
2. Has the pain and distress been relieved?
3. Has the stomach and digestive symptoms improved?
4. Have any other symptoms of pain or distress been relieved?

The object of the first question was to find out whether the operator's technique was perfect. Apparently there was only one failure, which required a second operation. The object of the second question was to find out whether the pain and distress caused by the kidney itself had been relieved. The object of the third was "Did a floating or movable kidney really produce digestive disturbances?" The fourth was simply put in to get the general result.

Thirty-two letters were sent and fourteen answers from patients and eighteen answers from physicians were received. There were some duplicates, but the condition of twenty-five of the patients was found. In six instances personal examination was made. A condensed report of the answers was given and Carstens made the following conclusions:

1. Movable kidney can be permanently fixed by a proper technique.
2. Undoubtedly many disturbances of digestion are caused by movable kidneys, probably by causing irritation of the sympathetic system, perhaps of the solar plexus.
3. Fixation of a loose kidney will relieve some digestive disturbances.
4. Many of the nervous symptoms in this condition are relieved after a short time.
5. A proper diagnosis must be made before operating and the kidney found to be the cause of the trouble beyond any reasonable doubt.
6. The fixation of a floating kidney can not cure cancer of the stomach, remove gall stones, subdue an inflamed appendix, nor dilate a constricted bowel.—*Journal of the American Medical Association*, May 12, 1906.

J. D. ELLIOTT, M. D.

A REVIEW OF CANCER IN THE UNITED STATES, ACCORDING TO THE TWELFTH CENSUS.—Guthrie McConnell has prepared various tables showing the death rate in cancer as compared to consumption and pneumonia; the increase in the mortality between the decades ending in 1890 and 1900; the geographical distribution; number of deaths from this cause in the different races, nationalities, occupations, etc. He draws the following conclusions from his thorough study of the statistics:

1. Cancer appears to have actually increased in the United States 12.1 deaths per 100,000 population in the past ten years.
2. The death rate is higher in the rural districts and small towns than in the cities.
3. Native whites suffer much less than the foreign whites.

4. The death rate amongst the foreign whites in the United States is only apparently greater than in their own homes.

5. 63.1 per cent. of all cancer cases are in women and 36.9 per cent. in men.

6. Those employed in hard, outdoor work have a higher cancer mortality than the sedentary classes.

7. The areas showing the greatest mortality are mountainous and are well watered and timbered.

8. Cancer does not seem to be generally more prevalent along rivers.

9. Those cities in which there are both a large German population and large brewing interests do not show a corresponding increase in cancer mortality.

10. Cancer mortality is greatest in persons of 65 years and over.

11. The average age at death is 58.1 years.—*Journal American Medical Association*, April 28, 1906.

J. D. ELLIOTT, M. D.

GLAUCOMA AFTER CATARACT EXTRACTION.—De Lapersonne reports a case in which six weeks after the extraction, made with the iridectomy glaucoma supervened. In the absence of other apparent causes, he was disposed to attribute this complication to an edema of the vitreous, and this in turn is due to an interference with the renal functions.

The curves showing the excretion of the urine and the chlorides both showed their minimum at the time of the outbreak of the glaucoma attack. The urine had shown a trace of albumen before the operation.

He advises, in cases that are at all suspicious to examine the renal secretion, and particularly the excretion of the chlorides, so that by properly regulating dietetic and therapeutic measures these accidents may be prevented. According to the reasearches of Cantonnet, in cases with normal renal drainage, one may apparently be able to regulate the eye tension either by the addition of salt or the withdrawal of salt from the diet; according as the cases are of one sort or the opposite, in respect to the excretion of the chlorides.—*Annals of Ophthalmol.*

WILLIAM SPENCER, M. D.

PARALYTIC STRABISMUS FROM FRACTURE OF THE SPHENOID BONE.—The case reported is a very interesting case of head injury in which strabismus developed as a result of fracture of the sphenoid. The patient, a man 33 years of age, was injured by having his head caught between the buffers of two cars. He was dazed at first, then became conscious and after an interval of several hours developed alternating stupor and delirium.

The upper part of the right pinna was torn from its attachment, and over the zygoma there was a punctured wound through which no bone could be felt, and there were no external signs of fracture on this side. There was considerable clotted blood in and around the right auditory meatus, and a watery discharge coming apparently from the meatus. Above and behind the left ear there was considerable hematoma, with blood clot crepitus and though the receptiveness of the edge of the blood clot was kept in mind it was considered that the edge of a depressed fracture could be felt at this point. There was no muscular paralysis. Pupils were mid-wide and

equal. No ocular paralysis was to be detected in the unconscious patient. Immediate operation was performed to elevate the supposed depressed fracture, but no fracture was found and accordingly the wounds were sewed up. On the seventh day after the operation, it was first noticed that there was an internal strabismus, which gradually increased in depth. The patient was troubled with double vision. This disappeared through time, although the strabismus remained marked. Hearing was much impaired.—Drs. J. M. Wainwright and G. D. Murray.—*Annals of Ophthalmol*

WILLIAM SPENCER, M. D.

NUTRITION AND NUTRITIVE CHANNELS OF THE EYE.—Venneman gives an extensive and interesting review of the methods of nutrition in the eye, which is based on experimental work. His views differ materially from those of other workers in many points. He premises that the eye is nourished by an arterio-capillary net work from which the blood goes to a venous capillary net work, and the lymph to a capillary lymph net work.

Lymph vessels are not found in the eye; even the choroidal perivascular lymph spaces of Sattler, Vanneman does not recognize; according to him, both ocular chambers and the supra-choroidal space are serous cavities and not true lymph spaces. These peculiarities explain why in localized ocular tuberculosis, this does not spread by means of the lymph channels as in other parts of the body, but the tubercle bacilli in the affected parts die out, without giving rise to generalized infection.

In the eye we meet three fluids—the blood plasmas, the connective tissue fluids, and the aqueous humor. The latter contains only the blood contents easily diffusible through the blood vessel walls; salts, glycose, ferments, the easily diffusible albuminoids, toxins and proteolysin. Only through diseased vessel walls does blood albumin enter into the ocular fluids. According to Vanneman's conclusions the Fontana canals form not a filtration angle, but an osmosis angle.

The intra-ocular tension is dependent upon osmosis between the three intra-ocular fluids. An enucleated eye has a lowered tonus, because the vascular pressure fails. Put it in distilled water and the tension rises because in consequence of the osmosis water is drawn into the globe. Put it, however, in a 2 per cent. salt solution and the tension falls, on account of fluid being drawn out of the globe by osmosis into the salt solution.—*Annals of Ophthalmol*.

WILLIAM SPENCER, M. D.

THE TREATMENT OF RUPTURE OF THE UTERUS.—Like many other important medical questions, the problem of the most effective treatment of this serious accident, is not yet solved. In an extensive article of 100 pages, Eversman reviews the entire subject and makes many statistical comparisons. In spite of the current tendency to give patients having serious internal accidents the benefit of surgical intervention, he believes that the best results are obtainable by overcoming the tendency to uterine atony by inducing a thorough contraction of the uterus and by the use of persistently applied pressure from a sand pillow or a properly placed pad and bandage. This is the important step; and next he advocates tamponing the lacerated locality, including the region out into the parametrium. In summarizing he

says: 1. As a rule for treatment of rupture of the uterus a procedure must be instituted which can be carried out by every physician wherever he finds himself. 2. This requirement is only fulfilled with a prospect of success, by exact tamponade in conjunction with a firm compression binder. 3. Drainage with a tube is entirely useless; it could only be used with a never certain exclusion of danger from hemorrhage and infection. 4. Laparotomy must in general be reserved for those cases in which the rupture occurred in the clinic. 5. Only in a few definitely indicated cases is the laparotomy to be performed under all circumstances, and then also transporting the patient may be recommended. These cases include absolute contraction of the pelvis; impassability of the cicatricial, contracted soft parts; irremedial inclusion of intestinal loops; and escape of the decapitated head or of the placenta into the abdominal cavity. 6. In all other cases is transporting of the patient to be avoided. It is claimed by the adherents of operative treatment that with an improved technique the results would be better, but this has not been realized, and the results have ever been worse than from the conservative treatment. The author found a mortality of 45% from the former, and but 20% for the latter method of treatment. *Arch. f. Gyn.* Vol. L, 76, 601.

THEODORE J. GRAMM, M. D.

THE CONSERVATIVE TREATMENT OF INFLAMMATORY DISEASES OF THE ADNEXA.—Karl Fett has written a noteworthy article on this subject and reports 46 cases from Staude's clinic in Hamburg. He says although this number of cases is rather small, yet the results are about the same as those obtained in larger series of cases. Years ago such cases were treated mostly by hydrotherapeutic means and many patients were sent to the various health resorts. Later the antiseptic method made the operative treatment possible. A tube having the thickness of a finger was regarded as irreparable, and the demonstrable collection of pus was subjected to the knife. The mortality varied from 1 to 10%. This operative treatment which involved uni- or bi-lateral removal of the adnexa was soon followed by the more radical total extirpation. While the latter method avoided the after effects of the former, and which consisted in exudates on the stump, fixed malpositions of the uterus, perimetritis, hemorrhage and fluor, yet now appeared the phenomena of premature climaxis in their entire extent. From 50 to 90% of patients suffered in this manner, whereas those who retained one ovary did not complain. This caused a change of opinion, so that even in 1895 Kustner cautioned against including the recent gonorrhœal inflammations with those in the "chronic stage requiring operation." Our author's cases were treated by rest in bed, ice bag, opium, the hot air treatment to the pelvic region, ichthyol tampons and hot vaginal douches. The mortality was nil. Of 38 cases so treated 15 were entirely cured, 10 were much improved and could resume their daily avocation, in 7 this was partially possible, 4 left the hospital voluntarily, and in 2 improvement was but slight. These results were obtained within four weeks. In 8 cases not improved the abdomen was opened and the most serious conditions found to be present. He summarizes as follows: 1. Inflammatory adnexal diseases should be treated conservatively under all circumstances, in the acute

stages expectantly alone, in the chronic combined with resorptive remedies, particularly with hot air. The treatment should usually be continued in the severe cases for several months and as a rule leads to restored ability to work. The permanent results are good and are equal to the best obtainable from operation. 2. That the cure in an anatomical sense is possible even when serious changes are present, is proven by the cases of later pregnancy and occasional ocular inspection. 3. If perforative peritonitis threatens, laparotomy is indicated at once. So also is salpingo-oophorectomy justified when after treatment improvement remains absent, as exceptionally it may. But the operation should be conservative, that is by retaining healthy or functioning organs. 4. Kolpotomy is only called for when with a favorable location of the tumor (projecting and fluctuating), incision and drainage is indicated by a circumscribed collection of pus and the continuance of fever for weeks. 5. The fixed deviations of the uterus frequently remaining after retrouterine exudates sometimes make ventrofixation necessary after conservative treatment. But this is not dangerous and gives good permanent results.—*Monatsschr. f. Geb. u. Gyn.* Bd. XXII, 674.

THEODORE J. GRAMM, M. D.

THE APPEARANCE OF THE FIRST MENSTRUATION AFTER AN ABORTION.—Engländer says while it is generally known that the normal puerperium after a childbirth continues 6 to 8 weeks, at which time the first menstruation tends to appear, yet statements are rather meagre about the appearance of the first menstruation after an abortion, and they generally do not mention a definite time. Leopold says the new mucous membrane may already be complete in the third or fourth week post partum and is surely so after the sixth week, and the first period occurs then. A number of authors are of the same opinion. Several writers who have studied the subject have expressed the opinion, depending upon microscopic examinations, about the involution of the uterus and about the uterine mucous membrane, that the latter acquires its normal appearance earlier after an abortion than after a child birth.—Polano says 4 to 8 days—but the clinical question of the appearance of menstruation is usually left untouched.

The author has closely studied 57 cases and found in 65% the menses appeared 4 weeks later; in 14% in the 5th week; in 10% at 5 weeks; 3% in the 6th week; and in 7% at the 6th. From this it appears that menstruation returns as a rule 4 weeks later, namely at about the time of the usual menstrual period among the majority of women. It is evident, therefore, that 6 to 8 weeks being the usual time for the menstrual recurrence after childbirth, that this is an exceptional time after abortion, and that after the latter occurrence the system earlier acquires its physiological function. The changes in the uterus in the earlier months of pregnancy are not so extensive as at the end of gestation.

The deductions above mentioned are drawn from cases which terminated in a rather short time and in which the system was not materially affected by prolonged hemorrhage, retention of membranes, infection, fever, exudates, &c. The existence of these conditions materially postpones the time of the first menses after abortion.

The knowledge of these facts has a quite practical significance for the

physician when confronted by the question whether or not he shall operate a case in which a sanguineous discharge appears, say 4 weeks after an abortion. Respecting this the author says if the abortion terminated after a couple of days of hemorrhage and after a longer period of freedom from bleeding the menstruation appears, we are justified in regarding the latter as the regular period; but if hemorrhage recurs after shorter periods we may assume that shreds are retained in the uterus and the curette is required.—*Zentralbl. f. Gyn.* 1906, 211.

THEODORE J. GRAMM, M. D.

MENSTRUATION DURING LACTATION.—It is a commonly accepted opinion that menstruation is absent during lactation. Several German text books assert the same. On the other hand Czerney and Keller say that the recurrence of menstruation is usual, while its absence is the exception, during lactation. The French appear to incline to the latter view. Among 685 women Mayer found that menstruation reappeared in 58% during lactation. Essen-Møller (Lund) has re-examined the question in 428 women and found that in 59% menstruation regularly reappeared. It was absent in 32%. In 7% menstruation appeared during one lactation period and was absent during the next. The details of his observations are shown in several tables. He concludes that menstruation occurred during lactation in about 60% of his cases, and may be regarded as a normal occurrence. In over half of the cases (38%) menstruation appeared in the first two months, and during the subsequent months with diminishing frequency. A preponderance of primiparæ could not be demonstrated.—*Zentralbl. f. Gyn.* 1906, 175.

THEODORE J. GRAMM, M. D.

CAESARIAN SECTION REQUIRED ON ACCOUNT OF SEVERE HEMORRHAGE FROM A VULVAR VARIX.—Brunet (Magdeburg) reports a rare case of this sort. Many of us have doubtless seen such cases where this accident threatened with startling seriousness. The case reported is that of a 19 year old primigravida in whom profuse hemorrhage occurred from two places near the meatus, and almost exsanguinated the patient. The veins upon the vulva and vaginal walls were greatly distended and on the point of rupturing. Labor pains had not yet begun. Tamponing the vagina was tried, but during three succeeding days on each attempt at renewal the hemorrhage was so great as to threaten the life of the patient. Artery clips were useless on account of the friability of the tissues. On this account the Cæsarian section was performed. The lower extremities did not show varicose. Such a case was only once observed among 4,000 patients in this institution. Wüllmers collected 16 such instances in the literature, 7 of which terminated fatally. Ruge and Martin have successfully treated cases of varicosis of the extremities by repeated ergot injections.—*Zentralbl. f. Gyn.* 1906, 43.

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY JOHN HUTCHINSON, M. D.

THE NEURASTHENIC STATES CAUSED BY EXCESSIVE LIGHT.—Chas. E. Woodruff (*Medical Record*, Dec. 23, 1905) first refers to the various ways in which different forms of light have been made use of for therapeutic purposes, and then goes on to explain his theory that an excess of light may be injurious, owing to the underlying law that the effect of the short waves is always destructive and never constructive. The author's view is that the various races have been provided by nature with a degree of cutaneous pigmentation suitable for the average intensity of light in the region in which they are natives. The blond, fair-skinned races are indigenous to the comparatively dark, gloomy, northern countries, whereas the inhabitants of tropical and subtropical latitudes are universally brunette. This principle is so radical that the blonds in the course of time tend to become extinct if they migrate to more sunshiny regions. By extending the process of reasoning, the author states that the excess of sunlight to which people of many parts of this country are exposed is distinctly injurious and is a potent cause of neurasthenia. He states that, as a matter of fact, neurasthenia is commoner in blonds than brunettes, worse in cities than in the country, and is vastly benefited or cured by removal to dark, gloomy climates. The same element is of importance in the treatment of tuberculosis, and the author says that excellent results in treating the disease in this country and in Europe are obtained in sanatoria where there is a minimum of sunshine. Woodruff suggests that a uniform system of recording complexions be adopted for the purpose of gathering statistics, and he has devised a numerical scheme of notation by using which it will be possible to secure uniformity in the records.—*Med. Age*.

CONVALESCENTS: THEIR CARE FROM THE MEDICAL STANDPOINT.—L. K. Frankel (*Medical Record*, Oct. 28, 1905) says that notwithstanding the strides that have been made within the past two decades in sanitary science, in the practice of medicine and surgery, in the betterment of living conditions, and in the general improvement in the physical status of all classes of the population, it is nevertheless a fact that in only a few diseases has the death-rate been lowered. A study of the census reports shows that while deaths from cholera infantum, diphtheria, and consumption were less in 1900 than in 1890, the reverse was the case for nearly all other diseases.

This state of affairs the author attributes largely to the fact that in hospital work and in private practice among the lower classes it is impossible for economic reasons to keep the patients under treatment until they are fully restored to health and strength, and in this way a large class of "half cured" people is developed. These are in a condition of lowered vital resistance, so that they easily fall a prey to serious illnesses. The remedy lies in the establishment of suitable convalescent homes, which shall not be like hospitals, but shall resemble as nearly as possible the normal home. For this purpose the country is most suitable, and where land is cheap such institutions should be built on the cottage plan.—*Med. Age*.

DIAGNOSIS IN SUSPECTED FRACTURE OF BASE OF SKULL.—As cerebro-spinal fluid consists principally of a watery solution of sodium chloride, its admixture with blood will prevent coagulation. Thus a blood-stained discharge flowing from the ear, nose, etc., after severe head injuries, which does not coagulate is positive proof of basal fracture.—*N. A. J. Hom.*

THE TREATMENT OF SEA-SICKNESS.—The latest method to be advocated for the prevention of sea-sickness has been suggested by a medical officer of the Hamburg-American Company. It consists of placing the susceptible individual in a chair that is vibrated electrically. The chair is connected with the electric supply of the ship. The patient sits in the chair with his feet placed on a foot-board and his arms resting on suitable supports, and a rheostat is provided by means of which he is able to regulate the electric current. A German exchange recently published an article on the method, in which the author stated that patients improved obviously under the treatment, but only so long as they remained in the chairs. Just how this method works is hard to explain, but if it will prevent sea-sickness it will be hailed by thousands of sufferers as a great boon to humanity.—*Med. Age*.

GROVER CLEVELAND ON MYSTICISM IN MEDICINE.—Practitioners of medicine are so accustomed to being the butt of jokes and jibes from the laity that rarely or ever do they pay any attention to them. Recently in an address before the Medical Society of the State of New York no less a personage than the Honorable Grover Cleveland had his little fling at the profession. He said in the course of his remarks that it would be well for physicians to be more candid with their patients, to speak in plain English, avoiding the mysticism that in the popular mind is the main object of the use of technical expressions, that convey either no meaning at all or else a confusing idea to the untutored understanding. Mr. Cleveland evidently views the question of mysticism in medicine only from his own point of view. Every physician knows how hard it is to judge how much of the truth it is permissible to tell a person who is seriously ill. The best physician is the one who is open and frank with his patients if they possess an order of intelligence high enough to stand being told just what ails them and what the probable outcome of the illness will be.—*Medical Age*.

"DESERVES SOME CREDIT."—After giving the therapeutics of Sepia quite accurately in the *Eclectic Review*, Dr. H. P. Webster concludes as follows:

"Though Hahnemann was the first to employ the juice of the cuttle-fish

in medicine, the idea was not original with him, as the ancients used the mollusc itself in the form of decoction for affections of the generative organs, urine and skin—the same departments in which the homœopaths now employ it. It, therefore, is not a homœopathic remedy, any more than it is an eclectic agent, nor quite as much for that matter, because the eclectics employ it for its specific action, a method as old, at least, as the time of Paracelsus. The homœopaths, however, have kept us in mind of the old practice, and deserve some credit.”

Yes, Hahnemann deserves “some credit,” for, as Lombroso remarked recently, “what has the old school of any value which is not based on the homœopathic law?” Hahnemann’s provings have “kept us in mind” of many things, and there are many more things to which we will awake and loftily toss his memory a crumb for keeping us in mind.—*Hom. Recorder.*

THE OPSONIC INDEX.—We sincerely hope that homœopaths will not allow themselves to lose their heads in the whirl of new discoveries on homœopathic lines which our allopathic friends are treating us to just now. In his discovery of a method by which it is possible to measure the disease-resisting power of the blood of any person or animal to any specific infection, Professor A. E. Wright has conferred a distinct benefit on medical powers of observation. But we think he would be the last man to claim that he had discovered in this any new principle.

It has been well known, in a general way, from ancient times that a great difference in resisting power exists between different persons, and by the same person under different conditions and at different times. It has been known to the medical world since Hahnemann’s day that certain remedies have the power of heightening this resistance to morbid action. The homeoprophylactic power of belladonna against scarlatina is a familiar example of a remedy raising the “opsonic index” of exposed persons in reference to a specific infection. The homeoprophylactic powers of vaccinum and variolinum against smallpox are others.

Neither can we rob Hahnemann of his epoch-making discovery of a method for discovering in any case of disease the most hopeful means of strengthening the vital resistance at the point where it is most urgently attacked. Homœopaths have always known these facts, and have been able to utilize them to the benefit of mankind. Professor Wright has enabled us to state some of the facts in different and more detailed terms. That is all. In order to make any practical use of his discovery he is compelled to adopt the homœopathic method. For our part, we should have more respect for these workers if they were to frankly admit their indebtedness to Hahnemann.

Nor is this allopathic excursion into homœopathy one whit more “scientific” than the practice of Hahnemann.

It is a curious fact that homœopaths frequently come to take the humble view of their science which allopaths are always ready to present them with. With the allopath, homœopathy is the reverse of everything that is “scientific.” The homœopath is apt to accept this and to rejoice exceedingly when he sees an allopath, armed with microscope and injecting syringe, do something homœopathic. This, he is apt to say, is really “scientific”—as opposed, of course, to the crudities of Hahnemann.

Now, this is all topsy-turvy thinking. Hahnemann's homœopathy is, and remains, the most solidly scientific thing in therapeutics, and nothing that bacteriologists may ever discover can shake its position in the very least. The work of Dr. Compton Burnett with the nosodes of cancer and consumption was every bit as "scientific" as anything that has since been done by Koch, Roux, Behring, Doyen or Jacob, and vastly more successful than anything these have to show.

It is a sad reflection on the homœopathic doctorate, and betrays a feeble grasp of the mighty truth their system embodies, that so many homœopaths are eager to learn homœopathy at second-hand from allopaths, when they have had teachers in their own ranks expounding identical facts for years.

However, we suppose we ought to be thankful that even allopaths are doing something, as Dr. Macnish put it, to "raise the opsonic index" of the homœopathic confraternity.—*The Hom. World*, London, June 1, 1906.

BRYONIA.—The following schema is selected from Dr. C. M. Boger's paper on "The Study of Homœopathic Materia Medica:"

(1) Symptoms arising or made worse from motion, even of a distant part. Averse to being moved, especially being raised up; it causes faintness. Coughing is especially painful; it may hurt the head, chest, abdomen or any other part. Deep breathing hurts.

(2) External pressure relieves. Quiet rest is a great help. Tight bandages feel good.

(3) Effects of heat: Becoming heated, in the sun, by the fire, while ironing, running, etc. The heat of the room is very distressing; it excites the cough, aggravates the headache and even makes the chills worse.

(4) Suppressed or undeveloped diseases often present indications for bryonia. It helps to unfold them.

(5) Sticking, stitching sensations in any organ or part.

(6) Bursting, splitting, distensive pains or a sense of overfulness. Mostly referred to the cavities of the body.

(7) Dryness: Of the skin. Of the parts usually moist (mucous membranes). Dry stool, scanty secretions.

(8) A right sided remedy. Preferably affects the larger joints.

(9) Inflammation of or congestion to internal parts. Many kinds of fever. Fever with a dry skin, burning heat and a full quick, tense pulse.

(10) Disposition to angriness. Beclouded mind. The mental symptoms and sweat are both worse from closing the eyes.

(11) Effects of eating bread, fruit, legumes, sourkrout, etc.

A most complete proving as well as a thorough testing with the pathogenesis as a base is necessary before we are able to establish the general outlines of a single remedy in this manner.

Fortunately for us nature does not reveal her secrets for the asking; we must perforce wrest them from their settings slowly and with the most arduous labor. We should bear in mind while doing so, that our progress will keep pace with our ability to follow natural channels of investigation. Discarding artificial methods as far as possible and training the powers of observation to their highest capacity, should be our aim. This is the way and the only one that will lead to better work and more cures. The way that will relieve suffering humanity surely and permanently.

Medicine is slowly arriving at this conclusion but it has been by a most circuitous route; in the near future we hope to see more rapid progress.

Homœopathy lies on the borderland of still greater fields of investigation and usefulness but those of you who accept it only lamely can hardly expect to leap across it into the regions beyond where your materialistic feet will feel still less secure.—*Cleveland Med. and Surg. Reporter*.

HUNTER ROBB, M. D., writes: It may be of some profit to discuss the uses and limitations of (1) the vaginal speculum; (2) the tampon; and (3) applications to the cavity of the uterus:

(1) For a skilled examiner the vaginal speculum is not necessary, but it can be used to advantage during certain operations, and in taking stitches out of the cervix or vaginal walls. In the rare instances in which a speculum is used in examinations those of the ordinary type should not be used for unmarried woman. A small cylindrical speculum is much preferable in these cases.

(2) If encouraged, women are apt to form the "tampon habit." Properly applied tampons often do good in cases of subinvolution of the uterus, and chronic salpingitis or ovaritis, and much more rarely in cases of retro-displacement of the uterus. But they must not be applied too frequently or over too long a period, as the necessary manipulations often cause irritation. In applying a tampon, the patient should be in the knee-breast posture, which causes the pelvic organs to gravitate towards the abdomen, so that as soon as the speculum is introduced the vaginal walls separate and the tampons can be placed behind the cervix, and to either side of the median line of the body. A number of small tampons is better than one or two large ones.

(3) Irritating drugs applied to the cavity of the uterus rarely do good. They sometimes cause poisoning. Intra-uterine douches of bichlorid of mercury have often caused severe cramps and shock, and many patients have died from the effects of the poison. Again the use of a counterirritant in the uterus may render the parts more susceptible to bacterial invasion and thus facilitate extension of the pathological process to the adnexa.—*Journal of Surg., Gyn. and Obst.*

TREAT YOUR PATIENT—NOT PNEUMONIA.—By Thos. B. Williamson, M. D., St. Louis, Mo. I realize the fact, from reading a number of articles on pneumonia, that the majority of the medical profession treats pneumonia and not "John Brown," and they seem to think it is caused by the "diplococcus," and they must treat it with antiseptics, and then they wonder why the mortality is so great in this disease.

The only question in my mind is, Why is the mortality not more than twenty-five to forty per cent? And did you ever stop for a minute to consider what these wise men use in treating this dread condition, as they all consider it? They begin with their strychnine from the very start, and in a few days add brandy and use morphine for the pains.

Now, gentlemen, do you consider this scientific treatment? If you will notice, it is the regular physician who has so great a mortality, and not the eclectic or homœopathic, for they only have from three to five per cent. of deaths in all their cases of pneumonia.

The only scientific treatment for any disease is to treat the condition as it advances itself, and in the first stage of pneumonia in a strong man, you will find a sthenic type of fever and a full, bounding, or a hard, wiry, non-compressible pulse. This calls for veratrum, and veratrum will relieve that condition. On the other hand, if you have a child or woman to deal with, you are most likely to find an asthenic type of fever, with a small, weak and rapid pulse. Use aconite, and if the child shows signs of passive congestion, dilated pupils, sleeps with eyes half open, rolling head from side to side, use belladonna, and for the pleuritic pain use asclepias, and for pains running through the lung tissues use bryonia. If you have difficult breathing, use lobelia, and as an expectorant use ammonium chloride.—*Eclectic Med. Jour.*

DR. BOISSARIE, of Lourdes, France, says an exchange, sent recently, as usual, his annual report to the Pope of the miraculous cures effected at the famous grotto of Lourdes in his charge. He received, in reply, a letter from Dr. Laponi, the medical attendant of the Pope, stating that in future the latter wished to have arrangements made to establish the identity of the persons thus cured, with depositions of physicians and witnesses who have seen the patients before their cure, placing the Lourdes experiences on a more scientific basis than hitherto.

FOREIGN LITERATURE.

CONDUCTED BY E. FORNIAS, M. D.

REPORT OF THE HOMŒOPATHIC HOSPITAL OF BARCELONA.—The *Revista Homeopática de Barcelona*, in its number of February last, gives the annual report of the Homœopathic Hospital "Nino Dios." The development of this institution, under the auspices of some of the leading ladies of Barcelona, and the assiduous work of its medical and surgical staffs, has been something marvelous. The number of patients admitted during last year included many incurable cases and the mortality did not exceed 6%.

The dispensary service, principally, has shown an increasing progress every year: In 1902 the number of patients treated were 9,355; in 1903 the number of patients treated were 13,752; in 1904 the number of patients treated were 16,216; in 1905 the number of patients treated were 20,375. Excluding holy days, the average is over one hundred cases daily. Such results are certainly an honor to Drs. Borrell, Sola y Pla, Galard, Planas, and Cirach, in charge of this service. In the women's wards the increase was also notable. In 1902, 74 cases were treated; in 1903, 90; in 1904, 102; and in 1905, 175. These cases included both acute and chronic diseases, and the value of our simple treatment was evident in the majority of them. Of the four cases of tuberculosis of the lungs treated, one was discharged cured and another very much improved. Five children with white swelling were sent home entirely cured by aurum, silicea, calcaria phos., and calcaria sulph. No operative measures were necessary; and a woman, with suppurative arthritis, is at present convalescing.

Thanks to our private pavilion, we have been able to receive and treat

several cases of infectious disease. One, a woman among them suffering from hemorrhagic smallpox, was completely cured by phosphorus and lachesis. Two others with common variola, were cured by vaccinium. Four cases of typhoid fever were treated with brilliant results, being the principal remedies prescribed baptisia, phos. acid, mur acid, and arsenicum. The same good results were obtained in five cases of grip, and in one of measles. We had only two cases of whooping cough, which were readily cured with belladonna, drosera, corallium, cuprum and ipecac. There were several cases, with disease of the respiratory tract, among them eight of broncho-pneumonia, principally gripal, which recovered quickly under bryonia, ipecac, phosphorus and tartarus emeticus. One of capillary bronchitis cured with bryonia and ipecac, and one of pleurisy with effusion, with cantharis. Of heart disease there were two cases, one of rheumatic endocarditis, cured with aconite, cactus, colchicum, and spigelia, and another with mitral insufficiency, which entered the hospital with lack of compensation, and where all treatment was of no avail. Ten gastro-enteritis, principally in children, were cured with belladonna, chamomilla, colocynth, ipecac, mercurius corrosivus, croton tigl., &c. One of acute hepatitis was treated successfully with bryonia and mercurius sol. There was also a good opportunity to treat, with good result, several cases of infantile paralysis, hysterism, softening of the brain, cerebral hemorrhage, as well as three of metro-peritonitis, one of salpingitis and one of Bright's disease.

In the surgical department, in charge of Dr. Galard, the following operations were performed with complete success: Three for anal fistula, one for lipoma of the vulva, one for contusion of the skull, several for diffuse abscess, in different parts of the body, and of traumatic origin, one of ingrowing nail, two of caries of the superior maxillary, one of prosthesis for the pavilion of the ear, &c., &c.

In the eye clinic, Dr. Borrell, oculist of the hospital, treated two conjunctivitis, one blepharitis, one lachrymal fistula, and one of cataract, which he operated with brilliant results.

Dr. Sola y Pla, specialist of the nose, ear and throat, had under his care three cases of otitis media, and one of nasal polypus, and all left the hospital entirely cured.

This is a short report of the work done at the Homœopathic Hospital, Nino Dios, during the year 1905:

Resume for 1905: Dispensary: Number of prescriptions: First quarter, 4,582; second quarter, 4,677; third quarter, 5,119; fourth quarter, 5,997. Total, 20,375.

Wards.	Patients admitted.	
First quarter	Women 22.	Children 25.
Second quarter	Women 22.	Children 22.
Third quarter	Women 13.	Children 24.
Fourth quarter	Women 26.	Children 21.
Total treated	Women 83.	Children 92.

Total patients, 175. Remaining in the hospital on the 31st of December, 23; 13 women, 10 children. Mortality during the year 1905: First quarter, 3 children, 2 of tubercular meningitis and one of tabes mesenterica. Second quarter, 2 women, one of pulmonary tuberculosis, the other of cerebral hemorrhage. Third quarter, one woman of pulmonary tubercu-

losis, and one child of athrepsia. Fourth quarter, 2 women, of pulmonary tuberculosis one, of hypertrophy of the heart, the other; and 2 children, one of Bright's disease, the other of tuberculosis. Total of deaths: 11 in 175 patients, or 6%, approximately.

DR. GIRO SAVALL.
E. FORNIAS, M. D.

BACTERICIDAL ACTION OF ZINC.—Zinc has a powerful destructive action on the microbes of water. The filings of this metal placed in drinking water, sterilizes it completely. To comprove this, it is only necessary to put in test tubes distilled water and the filings, planting afterward different microbes. At the end of thirty-six hours, the superior stratum is pure water, entirely deprived of pathogenic germs, which dropped down and became attached to the metal at the bottom; but after forty-eight hours, all the organic products have disappeared. If the liquid of the tubes were filtered before the microbes were put in, thus separating the zinc and the oxide of zinc of the dissolved part, then the filtered fluid will arrest microbial evolution.—*Revista de Medicina Pura*.

E. FORNIAS, M. D.

LOMBROSO AND HOMŒOPATHY.—It is most interesting to observe that Dr. Cesar Lombroso, Professor of Medical Jurisprudence and Psychiatics in the University of Turin, Italy, very well known on account of his anthropological researches, has come out as a militant homœopathist. In a letter addressed to the *Revista Homeopatica*, he says the following: "Of the two hundred Italian instructors, I am the only one who, during forty years, has practiced homœopathy in the psychiatric clinics . . . I understand why, a century ago, homœopathy was ridiculed, but to-day, what has the old school of any value that is not based on the homœopathic law? The study of micro-organisms and the development of the cellular theories are the affirmation of the principle admitted for some time by the general public that the maximum power is obtained with the minimum volume. Organotherapy and serotherapy prove that the more notable cures are made, not with antipathic agents, but with the homœopathic, and even the isopathic. Moreover, let us meditate on metallotherapy with which the cure of hysteria can be obtained; on radium by means of which lupus and other affections of the kind, are healed; and all this not with great quantities of compounds, but with agents which, while curing, do not lose any of their own substance or weight."—*Revista de Medicina Pura*.

E. FORNIAS, M. D.

HOMŒOPATHY VS. ALLOPATHY.—The time has arrived, says De Jousset, to answer Prof. Bouchard's dictum: "We have no doctrine in therapeutics; you homœopaths have one. Hence it would be desirable to have this question discussed with you." And true enough, there is no therapeutic doctrine in allopathy, because the traditional therapeutics of contraria has no actual base whatever, at least if applied to the treatment of diseases due to internal causes. The allopathic or etiological doctrine constituted by

Galenus, rests upon these two axioms: *Contraria contrariis curantur* and *sublata causa tollitur effectus*. It was a doctrine because it was moved and co-ordinated by the very principles of his pathology, through the idea he had formed of the genesis of diseases. According to this celebrated physician, diseases consisted in the alteration of the four humors: bile, atrabile, phlegm and blood. Therapeutics impelled by this idea resolved itself into two acts: to combat the alterations of the humors by the contrary of these changes; and finally, to complete the work by the evacuation of the sinning humors.

Here we have a therapeutic doctrine forming a whole, in which the principles and their consequences are linked together by an unquestionable logic. But when Harvey discovered the circulation of the blood, when it was demonstrated that bile was nothing but a secretion derived from the blood, that atrabile was only a manner of being of the bile, that phlegm or lymph was a liquid returned to the great circulatory torrent; when, in one word, the doctrine of the four elements of Galen, went down for good, the therapeutic doctrine, based on such physiology, ceased to be a doctrine; and so it was, how, in consequence of the movement obtained, but without any scientific season for it, the Galenic therapeutics continued to exist.

At the present time, Professor Bouchard could have asserted, there is no doctrine in therapeutics.

Years succeed each other, and physicians, deprived of a doctrine to be guided by, devoted wholly to routine, to empiricism, to the most contradictory systems, made of therapeutics a shameful art and frequently dangerous.

Nevertheless, they still retain an unhappy affection for *contraria contrariis*. At the beginning of the bacteriological researches, during these few years, when it was taught, that the pathogenic bacillus was the immediate cause, the cause that engendered disease, that each microbe belonged to a morbid class, as each grain corresponds to each kind of vegetable, the physicians, convinced that, this time, they had found the true cause of diseases; that this cause was not a hypothesis, as the alterations of the four humors, but a real factor, which could be seen, measured, cultivated and inoculated, they invented medical antisepsis, destined to destroy the pathogenic microbe, and thus bringing back to life the old Galenism, and its two formulas: *contraria contrariis*, *sublata causa tollitur effectus*.

In our times events travel with rapidity; the triumph was shortlived, and pretty soon the opinion that the pathogenic bacillus created disease, just as a seed generated a plant, was converted into an out of date conception. It was necessary to count with the soil, with the bouillon-culture, with the complicity of the organism, in other words, with a definite predisposition. And Professor Bouchard very explicitly said that the pathogenic therapeutics he proposed had nothing to do with the cause; that pathogenic therapeutics was, after all, nothing but the attentive study of the morbid process, and that from this study came out expectation when the disease had a tendency to get well and to the employment of serotherapy in serious cases.

In view of this last formula we grant that Bouchard has no therapeutic doctrine.—*L'Art Medical*.

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CLINICAL METHODS OF EXAMINATION.

THE CLINICAL EXAMINATION OF THE PATIENT IN DISEASES OF THE KIDNEYS.

BY

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I. Clinical History.

In making the clinical examination of a patient with suspected kidney disease we should obtain first the family history and personal history of the patient, next ascertain the character of the subjective symptoms and then make a physical examination of the patient, including a chemical and microscopical analysis of the urine. The principal points in the family history relate to the prevalence of diabetes mellitus, "dropsy," gout, stone, tuberculosis, "Bright's disease," cystic kidney and movable kidney among those related by blood to the patient. Reliance cannot always be placed on the statement that a near relative had "kidney trouble" for the reason that the laity use this term to include diseases of the lower urinary tract. Diabetes and "Bright's disease" are also terms which may be used synonymously by those not well informed.

The locality in which the patient lives is to be considered, especially if it be a limestone district, where calculous disease is common, or a malarial one, where hemoglobinuria occurs;

or one where extremes of temperature are found with sudden changes in the weather and prevalence of cold, damp weather—circumstances favorable to the development of nephritis.

As regards the age of a patient, in the case of a child we consider the possibility of an acute glomerular nephritis following an infection, but calculus and sarcoma of the kidney must not be forgotten. In young persons we are likely to find acute congestion, acute nephritis, chronic non-indurative (parenchymatous) nephritis, secondary chronic interstitial nephritis, renal tuberculosis and amyloid degeneration, although the last may occur at any age. In middle-aged persons we look for stone and for primary chronic interstitial nephritis; in the elderly for growths and for suppurative nephritis terminating chronic diseases of the lower urinary tract; chronic renal congestion following chronic obstructions to the circulation is also likely to be encountered in the middle aged or elderly.

Suppurative diseases in young males have usually an etiology of gonorrhœa, less commonly are tubercular in origin.

Suppurative diseases in married women may be referable to gonorrhœal infection from the husband, or exist as complications or sequelæ of various female troubles.

If we find a small amount of pus in the urine of a woman without phenomena of micturition, inquiry should be made, especially in the case of young girls, as to the presence of leukorrhea.

The sex of the patient has its bearing with reference to the relative frequency of the occurrence of hydronephrosis and of movable kidney in women, and of most of the other renal diseases in males. In young anemic women, however, the presence of chronic non-indurative (parenchymatous) nephritis may be suspected, as well as that of renal tuberculosis, though in the latter case not so commonly as in young males.

The occupation of the patient may prove to be a factor in the diagnosis, as in cases where metal workers and painters suffer from primary chronic interstitial nephritis, engineers or those working in draughts from acute glomerular or chronic non-indurative (parenchymatous) nephritis. We are likely to find primary chronic interstitial nephritis and arterio-sclerotic nephritis in those who combine brain-work with the worry of financial responsibilities; arterio-sclerosis, however, is also found where the history is one of poverty and hard labor. An

occupation where eating and drinking are excessive, as in "entertaining customers," should direct our attention to the possibility that primary chronic interstitial nephritis is present; syphilis of the kidney is also a possibility in such cases. Locomotive engineers are subject to diabetes mellitus, as are stock brokers and speculators.

The size and appearance of the patient are to be taken into consideration. Thus, we find mild cases of diabetes mellitus in the portly, especially among Hebrews, severe cases in the slender; movable kidney is common in thin women; renal tuberculosis in undersized males; stone and primary chronic interstitial nephritis in those whose general appearance may be that of good health. The complexion and facial expressions are somewhat suggestive; thus, we note the waxy pallor, swollen face and glistening eye of acute glomerular nephritis and the pallor and doughy face of chronic non-indurative (parenchymatous) nephritis; the light fawn color in some cases of primary chronic interstitial nephritis, the sallow hue of amyloid degeneration, the cachectic look of tuberculosis and advanced malignancy, the dull but anxious expression of chronic renal congestion and of the last stage of chronic interstitial nephritis should not be overlooked.

The mentality of the patient may be of some aid in forming an opinion: A clear mind with expression of anxiety points generally to the heart as the primary locality of the disease, with the kidney secondary; dullness, forgetfulness and drowsiness suggest toxemia, as in acetonemia and uremic conditions, although in chronic renal congestion the patient may be dull and slow of speech. Melancholy or apathy suggests diabetes mellitus.

Having observed these characteristics of the patient, we next delve into the history of previous ailments. A good deal of patience may be required and some skill necessary to bring out the points of etiological importance. In obscure cases, however, a thorough knowledge of the previous clinical history is a necessity.

A recent infection usually points to the presence of some acute renal lesion, an infection occurring years previously to a chronic one. A history of long-standing cardiac disease points to the presence of a chronic congestion of the kidneys; one of recent surgical operation or of violent physical strain to acute congestion. A history of dropsy, from which the patient "re-

covered," followed months or years afterwards by headaches and cardio-vascular changes, suggests secondary chronic interstitial nephritis, the original dropsy being probably due to chronic non-indurative (parenchymatous) nephritis.

A previous history of "good health" should direct our attention to the possible presence of primary chronic interstitial nephritis or of stone in the kidney.

Syphilis as a history suggests either syphilis of the kidney, chronic non-indurative (parenchymatous) nephritis, or amyloid (waxy) degeneration; amyloid degeneration is also to be inferred where a history of long-standing suppuration from any cause is present.

In a pregnant woman a history of suddenly occurring urinary and uremic symptoms points to the kidney of pregnancy, one or more gradually occurring symptoms to an exacerbation of a previous nephritis.

The history of a neglected urethral stricture may have a bearing on the existence of chronic interstitial nephritis; one of uterine misplacement on hydronephrosis; of prostatic disease or vesical calculus on suppurative nephritis; of renal calculus on malignant tumor; of backache, hematuria and albuminuria, followed by putrid, alkaline urine on renal tuberculosis; of nodular swellings in the testicles, prostate and seminal vesicles on renal tuberculosis.

In cases of hemoglobinuria look for a history of malaria or of injury to the kidneys; in infants, for one of use of unsuitable artificial foods, causing scurvy.

If blood be present in the urine, the history is of much significance. Thus, a history of hemorrhage from the kidneys recurring at somewhat long intervals without reference to exertion is suggestive of the presence of a renal growth; one of hemorrhage following physical exertion, of stone; one of hemorrhages frequently occurring even when the patient is at rest, or during the night, of tuberculosis; one of endocarditis and sudden hemorrhage, of renal embolism.

If pain be not complained of by the patient at the time of examination, a history of severe and suddenly occurring pain following the course of the ureters and perhaps ceasing suddenly, suggests more commonly renal calculus, less commonly tuberculosis and growths, the pain in the latter cases being referable to the passage of tubercular products, clots, etc.

A history of pain and soreness in the region of the kidneys,

which at times is almost nil and at other times moderately severe, also points to the presence of calculus in the kidney.

A history of lithemia or gout turns our thoughts in the direction of stone or of primary chronic interstitial nephritis. A history of what appears to be chronic interstitial nephritis, coupled with the finding of blood in the urine, together with casts, should suggest the possibility of cystic kidney; one of rapid child-bearing, movable kidney; one of gonorrhœa, diseases of the lower urinary tract or possibly pyelitis; of anemia, especially in women, chronic non-indurative (parenchymatous) nephritis; of gluttony and alcoholism, chronic nephritis.

The subjective symptoms of the patient are next in order. The brain and nervous system must first be studied with reference to their subjective symptomatology.

Headache is a symptom of importance, especially in primary chronic interstitial nephritis. In this disease the patient may complain of an occipital headache, extending down into the nape of the neck or of unilateral headache (uremic hemi-crania). Agonizing and persistent headaches (especially in middle-aged men) call for an immediate examination of the urine, as they are common in chronic interstitial nephritis. Severe frontal headache is suggestive of acute uremia. Sudden and severe headache in a pregnant woman should cause us to test the urine at once for albumin. Supraorbital or occipital neuralgia of a persistent nature has a bearing on the presence of chronic interstitial nephritis, as it may be due to chronic uremia. Vertigo is another important subjective symptom, as it is fairly common in chronic interstitial nephritis.

Slight dizziness or attacks of complete unconsciousness may also be features of this disease. Sense of weight and pressure in the head may accompany such attacks.

Among cerebral symptoms drowsiness, stupor, delirium, convulsions and coma point to the existence of either uremic or diabetic intoxication. Delirium of a low order with pus and albumin in the urine points to suppurative nephritis.

Among other subjective symptoms insomnia, mental disturbances and melancholia suggest uremic or diabetic intoxication. Mental depression is very common in diabetes mellitus. Loss of memory and aphasia make us think of uremia, mental hebetude and slowness of speech, of diabetes mellitus and of chronic renal congestion. Insanity may be due to nephritis and is not uncommon in the course of diabetes mellitus.

Among minor mental symptoms fickleness and deceitfulness in small matters point to the possibility of the presence of diabetes mellitus. Hypochondriasis and mental depression in cases neither nephritic nor diabetic should prompt us to examine the urine for sediments of urates, oxalates and phosphates. A change of disposition, with morbid depression, peevishness, suspiciousness or impatience suggests chronic interstitial nephritis.

Among the symptoms referable to the condition of the eyes "blurring" on reading is of prime importance and suggestive of the retinitis of nephritis and of diabetes mellitus. Gradual impairment of the vision is also a feature in some cases of these diseases. Sudden blindness should cause us to think of uremia, as also such disturbances of vision as photopsia, diplopia, blindness of one-half the visual field, inversion of objects or more or less indistinctness of vision.

ringing in the ears or failure of hearing is also to be noted as related to uremia as a cause. Nose-bleed is a symptom of importance in its bearing on chronic interstitial nephritis, primary or secondary, especially when combined with blurring of the vision, suggesting retinal hemorrhage as well.

Dryness in the mouth and of the tongue, aching teeth and thrush should direct our attention to diabetes mellitus as a possible cause. Complaint that the gums are spongy and easily bleeding may also be made by the patient in the course of the same disease.

Symptoms referable to the respiratory tract are extremely suggestive; unaccountable shortness of breath or spasmodic dyspnoea makes us think of chronic interstitial nephritis, as does persistent hoarseness. Bronchial cough is also found as a symptom of this disease and of chronic renal congestion. Dyspnoea growing worse late in the night and in the early hours of the morning is a very common symptom in the last stage of chronic interstitial nephritis and chronic renal congestion.

Dyspnoea in acute nephritis may be referable to hydrothorax, hydropericardium and ascites.

A sighing, panting or blowing dyspnoea occurs in diabetic coma. Among symptoms referable to the circulatory apparatus we should observe especially the following: Palpitation of the heart, consciousness of violent beating of the heart, throbbing in the temporals and a feeling of fullness in the head,

characteristic of cardiac hypertrophy in the course of chronic interstitial nephritis.

Chills, when complained of by the patient, should cause us to look for pus in the urine, as in pyelitis, suppurative nephritis and renal tuberculosis. But chills may also occur at the time of renal colic from passage of calculus, and a sudden chill may be observed in renal embolism, less commonly in acute nephritis.

Gastro-intestinal symptoms are to be carefully noted: Unaccountable nausea or vomiting is a suspicious sign and should always suggest an examination of the urine for albumin and casts; epigastric distress in a pregnant woman points to the "kidney of pregnancy"; vomiting and diarrhoea direct our attention to the possible presence of amyloid kidney, or of suppurative nephritis; chronic constipation to diabetes mellitus. Nausea, vomiting and more or less abdominal pain not necessarily renal in location may yet be symptoms of renal calculus.

Severe gastric crises (vomiting and abdominal pain) may be due to acetoneemia in the course of severe diabetes mellitus.

With reference to cutaneous symptoms, the patient may complain of intense itching in uremia and of an unpleasant ammoniacal odor of the body. Attacks of numbness and tingling in various parts of the body may also be noticed by him in uremic and diabetic states.

The symptoms referable to the muscular system include twitchings of the tendons, which are very common in uremic states, and general muscular weariness, the latter sometimes one of the earliest symptoms of chronic interstitial nephritis. Cramps and tremors occur quite frequently in uremic states. Cramps of the calves of the legs are also complained of very commonly by diabetic patients.

Much can be learned from study of the pain of which the patient complains; some of the indications have already been referred to, but in addition the following should be noted: Intense pain referred to the epigastrium or to the umbilical region to the left of the median line may be due to kinking of the ureter in cases of movable kidney; or in the latter condition we may find a chronic pain in the renal region like a neuralgia. Severe paroxysmal pain in the region of one kidney, radiating from the flank into the bladder, suggests renal calculus, less commonly renal tenesmus or tuberculosis. In renal calculus the pain is violent, agonizing and sharply defined along the

course of the ureter. Deep-seated pain in the back over the kidneys and aching in the loins especially, with tenderness over the renal region on deep pressure, may be due to acute hyperemia, acute nephritis or renal calculus. A dull or violent continuous aching not affected by movement and either fixed or shooting outward and downward from the kidneys is suggestive of malignant tumor of the kidney. A bearing-down pain in the renal region is likely to be due to ureteral disease and when spasmodic suggest renal tenesmus (spasm of the ureter).

Sudden violent renal pain occurring in paroxysms and not ceasing suddenly, but only gradually wearing off, is likely to be due to a calculus impacted in the ureter.

Sudden pain in the back, with vomiting and chills, especially if the heart is weak, may be a sign of renal embolism. Finally absence of pain in the renal region does not exclude the presence of nephritis.

So-called "rheumatic" pains chiefly in the knees, chest and back may be due to the presence of diabetes mellitus.

Among important urinary symptoms we should note the following: First, and of prime importance, the voiding of a considerable proportion of light-colored urine at night, one of our most reliable signs in chronic nephritis in males, but far less reliable in the case of females; next, the voiding of a small quantity of urine in twenty-four hours, 500 c. c. (one pint) or less, which may be referable to kinking of the ureter in movable kidney or to congestions or acute conditions (acute nephritis or acute exacerbations of chronic nephritis); persistent in chronic congestion of the kidneys and in the last stage of chronic interstitial nephritis, but more or less temporary in or about the time of an acute uremic attack or when renal colic is present or kinking of the ureter takes place from movable kidney.

Then, again, the voiding of an excessive amount of urine more than 1,500 c. c. (three pints) directs our attention to the possible presence of some form of diabetes or of chronic interstitial nephritis; or of chronic pyelitis, if pus is present in the urine.

An intermittent flow of much clear urine is strongly suggestive of hydronephrosis, but a rapid and frequent variation in the amount of urine is said to be characteristic of amyloid disease. Large quantities of clear urine may sometimes be voided by patients during attacks of renal colic.

Phenomena of micturition, as a rule, suggest diseases of the lower urinary tract, but we also must be aware of the following: Painful and frequent urination may occur during attacks of renal colic, in acute nephritis and in acute congestion, especially when caused by poisoning from cantharides, turpentine, etc. A pressing desire to urinate, with more or less pain and spasm of the bladder, may be noticed in renal tenesmus (spasm of the ureter). Vesical tenesmus and pain on urinating are not rare in cases of suppurative nephritis.

II. *Physical Examination.*

The physical examination of the patient includes what is to be found by inspection, palpation, percussion and auscultation.

Instrumental examination is also to be made in surgical cases, but will not be considered in this article.

Inspection of the patient is of help in various ways. Thus, we notice pallor and puffiness under the eyes in nephritic conditions, a sallow complexion in amyloid cases, sunken eyes in emaciated diabetics, a flushed face which later may be sallow or jaundiced in suppurative nephritis, a pale anemic face in renal tuberculosis and a thin, drawn, cachectic look in malignant disease of the kidneys. A subjaundiced hue is common in chronic renal congestion and in the last stages of chronic interstitial nephritis. Blueness of the lips or a cyanotic hue about the mouth may be observed and is usually significant of the conditions associated with cardiac changes, as in arterio-sclerotic kidney, chronic renal congestion and chronic interstitial nephritis.

Inspection of the face may also show presence of facial edema, an important sign in nephritic conditions, and one often well marked in cases of acute nephritis and of chronic non-indurative (parenchymatous) nephritis.

Whether or not facial edema be present, we are likely to observe a pallid face, more or less distorted features, staring eyes and a urinous breath in uremic states.

In diabetic coma a livid face or a pale face, cold to the touch, is not uncommon.

Inspection of the pupils, if revealing contraction, may indicate uremic myosis, in which case the pupils will react sluggishly to light.

The odor of the breath is to be carefully noted: A urinous

odor is common in uremia and a fruity one in the acetonemia of diabetes mellitus.

Inspection of the mouth may reveal the furred tongue, foul breath, edema, hyperemia and swelling of the lips noticed in uremic stomatitis.

In uremic states the tongue may be furred for a long period of time, even for weeks or months. It may be red, dry and cracked, or moist and glazed, or covered with a brownish scum, or furred and foul in the last stage of chronic interstitial nephritis when the patient is hopelessly uremic. A brown coat may be present in suppurative nephritis and the tongue be fissured and crusted.

The character of the breathing should always be observed: Thus, we find in acute uremia the breathing to be of a peculiar hissing character, the noise being made by the lips, while in diabetic coma the breathing is likely to be panting, sighing or blowing in character. In children with acute nephritis rapid shallow breathing suggests acute dilatation of the heart.

Inspection of the neck may show the jugular pulsations found in conditions where there is a cardiac dilatation, as in the last stage of chronic interstitial nephritis or in chronic renal congestion.

Inspection of the skin and surface of the body in general should be made for the purpose of discovering the presence of various eruptions, boils, carbuncles, abscesses and gangrenous processes which may accompany diabetes mellitus, and for ascertaining whether edema is present, and, if so, where and to what extent.

General anasarca points to nephritis, while edema of the lower extremities suggests circulatory obstructions, causing chronic renal hyperemia.

Inspection of the skin, especially about the temporal region and neck, may show a glistening deposit of urinary crystals having a greasy feel when rubbed with the fingers.

Inspection of the chest may show various pulmonary conditions, which may complicate the renal one, but which cannot be considered here.

Marked action of the heart may also be observed, as in hypertrophy, due to chronic interstitial nephritis.

A widely diffused, wavy and undulating cardiac impulse is suggestive of dilatation, as in the last stage of chronic interstitial nephritis and in chronic renal congestion, especially if at the same time the impulse cannot be felt by the palpating hand.

Inspection of the abdomen is important to discover the presence of a swelling in the renal region. Hydronephrosis, cystic kidney and malignant growths sometimes cause swellings which are plainly visible.

Palpation is necessary for the detection of movable kidney and serves also to detect the presence of tumors in well-marked cases, especially when hydronephrosis, cystic kidney or malignant disease is present. By palpation, moreover, we are able to detect fluid present in the subcutaneous tissues, which pit on pressure, and in the case of ascites fluctuation can be determined.

By palpation also we may detect displacement of the apex beat of the heart downward and outward, and also increased strength of the apex beat, which are common in chronic interstitial nephritis. Palpation also shows the cord-like arteries, sometimes found in chronic interstitial nephritis with arteriosclerosis.

Deep pressure over the region of the kidneys posteriorly is to be made in all cases examined. Sensitiveness thus revealed may have an important bearing on the sources of pus or blood found in the urine. Pressure along the course of the ureters may likewise reveal sensitiveness in suppurative conditions involving the pelvis of the kidney and ureters. Patients with stone in the kidney are likely to flinch when deep pressure is made over the region of the kidneys posteriorly.

In cases of paranephritic abscess there may be great sensitiveness to pressure. But in all cases care must be exercised to rule out general hyperesthesia.

By means of percussion we may discover various complications, pulmonary and cardiac, as hydrothorax and engorged liver common in chronic congestion of the kidneys, and hypertrophy of the left ventricle common in chronic interstitial nephritis.

Flatness at the cardio-hepatic angle in the fifth right interspace adjacent to the edge of the sternum may indicate pericarditis with effusion, as also an enlarged area of pericardial dullness when cardiac hypertrophy is excluded. Detection of associated pulmonary lesions, as pneumonia, pleurisy, pulmonary edema, etc., require percussion as an aid to the diagnosis.

Percussion is, moreover, of special value in determining the presence of a tumor in the renal region and is, therefore, of

much aid in the diagnosis of tuberculosis, cystic kidney, hydronephrosis, paranephritic abscess and malignant disease.

Auscultation is essential for detecting the various pulmonary and cardiac associated conditions. Accentuation of the second sound of the heart best heard in the second right costo-sternal interspace is a valuable diagnostic sign of chronic interstitial nephritis, as it is said to be present in 80 per cent. of the cases. The first sound is, moreover, usually more or less dull.

Valvular diseases of the heart are discovered by auscultation and the presence of them may account for an existing chronic renal congestion.

Dilatation of the heart in the last stage of chronic interstitial nephritis is suggested by a short and flapping first sound and a weakened second sound, as also by gallop rhythm and embryocardia, in the latter case the heart sounds resembling the ticking of a watch.

Auscultation detects in the third left intercostal space the to and fro friction sound of pericarditis. A peculiar loud metallic character of the pulmonary second sound is also noticed in this disease.

The various pulmonary complications of nephritis require auscultation as an aid in diagnosis. Abundant large and small rales of an unusually liquid character suggest pulmonary edema.

In addition to what is discovered by examination as above, we observe the features of the pulse and of the temperature.

The pulse is significant in several conditions: Thus, we find commonly a rapid one in acute uremia and in diabetic coma; one of increased frequency in tuberculosis; a rapid, feeble and intermittent one when the heart is dilated, as in terminal cases of chronic renal congestion and of chronic interstitial nephritis, but commonly a slow, full pulse in the stage of cardiac hypertrophy of the latter disease.

The temperature deserves attention in certain cases, as, for example, the very low one of diabetic coma and the more or less subnormal one in even mild cases of diabetes; the subnormal one more commonly than the increased one in acute uremia, the intermittent or irregular rise in suppurative nephritis and the evening rise in renal tuberculosis are characteristic in some cases.

III. *Urinary Examination.*

We next proceed to the examination of the urine.

As a matter of routine, the patient is advised to collect his urine as follows: He begins on an empty bladder, after breakfast, to save all the urine voided from breakfast to bedtime in a bottle or bottles labeled "Day Urine." He should be careful to void urine just before going to stool in order to avoid loss at that time. During the day he is to take the regular amount of exercise, if any, and to eat and drink as usual, except that the amount of fluid taken should be limited to four pints as a maximum, for fear that tube-casts, if present when the urine is voided, shall be washed to pieces by the excess of water before the examiner has opportunity to find them. As a rule, I tell the patient to drink no more than is necessary to quench his thirst. All urine voided after retiring for the night and including that voided on last rising in the morning is to be collected in a bottle or bottles labeled "Night Urine." The patient brings or sends the collection to me between the hours of ten and eleven in the morning, or as soon thereafter as possible. If he brings the urine, he is asked on his arrival to void urine in my presence, so that any phenomena of micturition may be observed and a strictly fresh sample of urine may be obtained in addition to the twenty-four hours' collection. If the latter be sent to me, the patient should void the extra sample just before sending the twenty-four hours' collection, and send it in a separate bottle. If the patient is at a distance, the extra sample should contain boric acid in the proportion of five grains to every four ounces of urine.

The urine, when received, is measured and the total quantity for twenty-four hours recorded, together with the ratio of the amount of day urine to that of night. An excessive amount of night urine, compared with day, *i. e.*, night urine equalling or exceeding the day in volume, directs our attention to the probable presence of some toxemia, except in the case of those who are wakeful and nervous during the night hours from worry or anxiety.

Samples of the day urine, of the night urine and of the freshly voided urine are next placed in centrifugal tubes and revolved in the centrifuge for five minutes at a speed of 1,500 revolutions per minute, after which the sediments are examined microscopically. The freshly voided urine is also, if necessary, allowed to deposit its sediment spontaneously, and examined

for casts. My experience thus far, however, is to the effect that it is easier to find casts in centrifuged urine than in that which deposits its sediment spontaneously. After the microscopical examination is finished, the day urine, the night urine and the fresh urine are separately tested for albumin, sugar, bile, indican and the acetone bodies, the degree of acidity noted and the odor observed.

The day and night urine are then mixed thoroughly, the various physical characteristics noted down and a quantitative analysis made for urea, uric acid, phosphoric acid and in some cases chlorine made. If albumin or sugar be present, the quantity of each is determined.

Urine containing pus or blood or both usually signifies that the case needs more or less surgical attention, as in stone, tuberculosis, tumor and disorders of the bladder, prostate and urethra. The possibility of the existence of hydronephrosis must, however, not be forgotten, even when pus and blood are absent, as also that of movable kidney. The presence of tubercasts without pus, blood or albumin, should, as Tennant suggests, direct our attention to the examination for movable kidney. The presence of high color in urine of low specific gravity should make us think of pernicious anemia, rather than of renal disease, even if a trace of albumin and a few casts be found. The presence of a high color, easily dissolved by addition of a little caustic alkali and coupled with development of a deep-red color, when ferric chloride solution is added to the original urine, points to the presence of drugs, especially those used for insomnia or headache. The blue-green color noticed in some urines is referable to the use of methylene-blue. If chloroform be used in making the indican test, presence of the iodides in the urine is shown by the red-yellow color imparted to the chloroform by the red-yellow urine after treatment with hydrochloric acid.

A bright yellow tint in the urine suggests the presence of a small amount of bile, even if the latter cannot be detected by the usual tests, as in cases of convalescence from jaundice.

The presence of albumin alone in the urine without pus or blood and unaccompanied by casts calls for a most thorough examination of both urine and patient, which, if negative in all renal aspects, suggests the presence of functional albuminuria in young persons or of arterio-sclerosis in those of middle age. The saturated salt solution should be employed, espe-

cially in the case of women, to distinguish nucleo-albumin from serum-albumin. The presence of nucleo-albumin usually signifies irritation of the genito-urinary tract. The presence of albumin and casts directs our attention to the existence of renal disease or of disturbance of the circulation affecting the kidneys. If the casts are waxy, large and coarsely granular or highly fatty the existence of chronic nephritis in some form is to be suspected. Absence of these casts, but presence of others, suggests the possibility of congestions, acute lesions, arteriosclerosis, chronic interstitial nephritis, stone or tumor. An enormous amount of albumin, especially if with relatively few casts, should make us think of syphilis of the kidney, amyloid disease or the kidney of pregnancy. The presence of brownish granular casts only, or in great preponderance, points often to some toxemia as that of jaundice (bile-stained casts) or of pneumonia. The presence of hemoglobin, connective-tissue shreds and blood-stained casts points to injury of the kidneys, scurvy in infants or hemoglobinuria from other causes. The presence of a moderate amount of albumin without casts and coupled with presence of pus or blood, but more than the latter accounts for, may be indicative of the presence of a malignant growth in the urinary tract, or of suppurative nephritis. The presence of a highly acid condition of the urine, together with sharp spiny crystals of uric acid, especially if pus or blood be present, strongly suggests the presence of stone in the kidney or ureter. Freshly voided urine, which is turbid, is suggestive of phosphaturia, pyuria, hematuria, choluria and, in rare cases, uraturia. Clotted masses containing blood, pus and connective tissue shreds should cause us to suspect the presence of a growth; clotted pus and phosphates, stone.

If sugar be found in all samples of the urine, which at the same time is of high specific gravity, the case is likely to be one of diabetes mellitus. If, at the same time, the acetone bodies are present, we are dealing with a severe case of this disease. If sugar be present in only one or two of the samples and absent in one or two, the case is likely to be a mild one, specially if a diabetic dietary is being enforced and in the absence of acetone bodies.

If a reaction for sugar is obtained in the urine of women during lactation, we must test for lactose by fermentation, as this sugar is not affected by yeast.

If the urine react doubtfully with the copper tests, we must

employ the bismuth test and fermentation to exclude uric acid and kreatinin.

If the urine have a peculiar color and we find the epithelium of tube-casts stained light brown-yellow, bile is present in traces even if the bile tests fail.

The finding of pus in the urine without casts is likely to signify in the majority of cases a disease of the lower urinary or genito-urinary tract. Particularly so, of course, when it occurs in conjunction with phenomena of micturition. But without the latter and in acid urine our thoughts turn in the direction of pyelitis-calculous, or tubercular, or perhaps gonorrhœal. Pus with albumin and casts of micrococci cause us to suspect the presence of suppurative nephritis, especially a terminal one, as in old genito-urinary cases or in vesical calculus. Blood intimately mixed with acid urine and showing blood shadows with the microscope is renal in origin and, when associated with numerous casts, points to the presence of a hemorrhagic nephritis, which in turn is generally an expression of some infection. Blood and blood-shadows in acid urine, together with presence of but few casts, hyaline and yellow-granular, are suggestive of renal congestions or of stone. Blood, pus and phosphates make us think of phosphatic renal calculus, renal tuberculosis or vesical calculus. Blood and blood shadows in acid urine, without casts or pus, indicate a renal hemorrhage, which is most likely to be due to stone, tuberculosis or a growth, except in the rare cases of neurotic origin. The passing of blood with phenomena of micturition we find usually due to disease of the lower urinary tract, but where large organized blood clots are passed from a renal growth, there will, of course, be pain and straining when the patient urinates.

It must not be forgotten that when the urine is negative, as regards pathological elements, the presence of hydronephrosis or of movable kidney is not necessarily excluded.

WARTS.—It is well known by good prescribers that to correct the condition which produces warts and to eradicate the warts themselves no one remedy is specific, but the remedy that is homeopathic to the case will cure. C. M. Boger, M. D., calls attention to *Berberis vulgaris* for flat warts (*Cleveland Med. and Surg. Reporter*). "Flat warts on the thumb" (Jahr.) Dr. Jules Gallivardin reported a speedy and complete cure. Dr. Noack says *Berberis vulg.* seemed to develop its action best when given in the third decimal potency in these cases.

PRIMARY SARCOMA OF THE SMALL INTESTINE.

BY

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Read before the Clinico-Pathological Society.

THE following two cases of sarcoma of the small intestine were treated in the Hahnemann Hospital. This condition is so rare and of so much interest that I wish to report them and the results reached by the study of forty-one cases found in literature. These records are more or less complete and I have attempted to include only cases of undoubted primary sarcoma of the small intestine. I have tabulated them and from the summary have drawn my conclusions.

For the material of the first case I am indebted to Dr. Sappington. Unfortunately the clinical history can not be found, but an autopsy showed a tumor of the jejunum with metastases in the lung, liver and mesenteric glands. Microscopically this proved to be a large round celled sarcoma in the wall of the jejunum, the metastatic growths being of the same character.

The second case was obtained through the courtesy of Dr. Van Lennep. The patient, a married woman, 63 years of age, had complained for several months of constipation and a sense of fulness in the abdomen when she wore corsets, but otherwise there were no symptoms of ill health.

Three days before admission to the hospital she was suddenly seized with very intense abdominal pains and said she felt as though something had given way inside of her. She was collapsed and her abdomen was distended, rigid and tender. She did not respond to treatment and when admitted to the hospital showed all the characteristic symptoms of septic peritonitis. Under an anæsthetic, which was immediately administered, her abdomen was thoroughly examined and a large, firm, irregular mass, flat upon percussion, was felt in the umbilical region. A median incision was made and a large quantity of foul pus with a fæcal odor was evacuated. There was a tumor the size of a man's fist in the small intestine, probably the lower jejunum, and several enlarged lymphatic glands, but no perforation could be seen. Six inches of the intestine and the glands were excised, an end to end anastomosis made with an unsupported suture and the abdomen drained, but the patient did not react from the operation, death occurring twelve hours later. No post-mortem was allowed.

The lumen of the excised gut was found to be somewhat constricted and tortuous, and the omentum was firmly attached to it and invaded by the neoplasm. The serosa was normal, and, except for being stretched out, the mucous membrane was apparently in the same condition. The tumor was firm, white on section, with here and there small hemorrhages. On microscopical examination it turned out to be a spindle-celled sarcoma, originating in the sub-mucosa. The latter was completely obliterated except the muscularis mucosæ, the greater part of which was intact. It had spread into the muscular coat, but nowhere were both the circular and longitudinal layers completely destroyed. The mucous membrane was not attacked, but had ulcerated at several areas. The serosa was thickened, infiltrated with round cells, but free from new growth.

Primary intestinal sarcoma is exceedingly rare. In twelve years (1882 to 1893), of the three hundred and thirty-five autopsies in the Vienna Hospital made upon cases of sarcoma, only twelve, including nine lympho-sarcomata, belonged to the intestine and in Bern only one of one hundred and two were in this tract (sarcoma of the ileum). In Prague in 13,036 sections in fifteen years there were only thirteen intestinal sarcomata (ten of the small intestine and three of the large), all lympho-sarcomata. During the period in which the thirteen cases of sarcoma were examined in Vienna and Bern two hundred and eighty-four intestinal carcinomata were discovered post-mortem. Czerny and Rindfleisch reported all of the intestinal and stomach operations in the Heidelberg clinic from 1881 to 1892 without one sarcoma. Although Schiller records three (one of the ileum, one of the cæcum and one of the colon) operated in the same clinic in the following four years (1893 to 1896).

I have included sarcoma and lympho-sarcoma in this paper, for, though they differ anatomically, the clinical pictures are identical, and in the cases studied the course, metastases and prognosis were the same. Nothnagel states that in lympho-sarcoma metastases occur only in regional lymph glands, but in over one-third of the cases in which distant organs were attacked the tumor was of this variety.

The distribution of sarcoma in the intestinal tract differs very much from carcinoma, at least one-half of the former occurring in the small intestine, while it is seldom met in the

large intestine except in the rectum. When the exact location of the tumor was stated, and when only one part of the gut was involved, the distribution was general, as eleven were in the ileum, nine in the jejunum and six in the duodenum. Various forms were represented, but the commoner were round celled, eighteen; lympho-sarcoma, fourteen, and spindle-celled, eight.

The growth usually begins in the connective tissue of the sub-mucosa, as in our second case, and early involves to a greater or lesser extent the muscular coats; the serosa and mucous membrane are rarely attacked, but the mesentery is frequently infiltrated for a considerable distance. Occasionally the mucous membrane may be the starting point of the neoplasm, and even when it is not involved ulceration of it may take place, probably on account of tension and interference with its blood supply. A large extent of the intestine may be affected, for the tumor tends to advance in the long axis of the gut. As is well known, this method of growth in the direction of the least resistance is characteristic of sarcoma. In the muscles of the thigh it burrows for long distances along the fibres before it approaches the surface, and in the femur it may spread the entire length of the bone before the Periosteum is broken through and the soft parts invaded. When the testicle is the seat of the disease the seminal vesicles may even be involved through the cord before the scrotal tissues. On the other hand, the growth may assume the character of multiple nodules and this is especially true of lympho-sarcoma. In three of the cases collected by Libman the entire small intestine was affected, and in one reported by Nothnagel there were numerous cicatrices of tubercular ulcers which had become the seats of lympho-sarcomata.

On account of the invasion of the musculature, and because there is so little intercellular fibrous tissue in sarcoma, which always contracts, dilatation of the intestine nearly always takes place, the amount depending upon the extent of destruction of the muscle. As a result large cysts or pouches of the mucosa may develop, containing bloody detritus and fæces, and these may give a sense of fluctuation upon abdominal palpation. Constriction, however, is possible, as it was present in eight cases and was almost complete in two of them. In two others the mucous membrane was bunched up, on account of shortening of the mesentery by invasion of the growth, and

nearly caused occlusion. In fourteen, no metastatic growths were discovered; nine after thorough examination post-mortem and five at operation. In nine others the mesentery and its glands only were affected; in three more the retroperitoneal glands were also involved, and in fifteen, six of which were lympho-sarcomata, there were new growths in other organs. Among them were the bladder, kidney, liver, gall-bladder, spleen, pancreas, stomach, lungs, pleura and heart.

General metastases may occur early, as Bessel-Hagen found new growths in the mesenteric glands, pelvic walls and kidneys in a case of spindle-celled sarcoma, which apparently followed a blow on the abdomen four months previously. Kitli, however, found only the mesentery affected with a tumor which had been increasing in size for three years.

The course pursued by the disease is usually rapid, death occurring within a year after the appearance of the first symptoms. There are several exceptions to this: in Bouilly's case severe abdominal pains and vomiting four or five hours after eating had been present for five years, and a tumor was found eight months before operation, at which an inoperable lympho-sarcoma was shown. Libman reports a case which had had paroxysms of pain, jaundicé, etc., for four years before death, the tumor being diagnosed post-mortem. Schiller performed an entero-enterostomy in a patient who had suffered with epigastric pains and oppression after eating for three years, but the tumor was only recognized four weeks before the operation. The longest times such tumors were known to be present were three years, Kitli, and fourteen months, Zuralski, both of them surviving operation.

A cause for the new growth was found in only two cases: Bessel-Hagen's, when a severe blow on the abdomen in a perfectly healthy boy was quickly followed by its formation, and Nothnagel's, in which lympho-sarcomata developed in cicatrized tubercular ulcers. The sex was stated thirty-nine times, twenty-four males and fifteen females. More occurred in the fourth decade than in any other (thirteen), nine in the third, seven in the fifth and six in patients under ten years of age. Only two developed after fifty years; the youngest was Stern's, who found an angio-sarcoma in the duodenum in an infant three days old. The case operated by Dr. Van Lennep, sixty-three years, was the oldest in the series.

At first the local symptoms are insignificant, the general

health being early affected, and it is usually late in the course of the disease when an abdominal tumor is recognized, then often by the patient accidentally noticing it; and many times there are practically no symptoms until a complication, as septic peritonitis or intussusception, arises. The difficulty in arriving at a clinical diagnosis can be easily seen, for a tentative diagnosis of sarcoma of the intestine was made in only one case. When septic peritonitis or intussusception was present it was recognized, but in a great majority no diagnosis was given. Libman says that it may closely resemble appendicitis, and three of the cases he reported were so diagnosed, but they were the only ones in which such a mistake was made, and from studying the symptoms he records I cannot see the similarity.

The clinical picture is very different from carcinoma, of which stenosis gradually leading to bowel obstruction is so characteristic. In sarcoma, emaciation, pallor, debility, general ill health, as in malignant disease anywhere, with abdominal pain, either constipation or diarrhoea or alternating attacks of each, distention and tumor are the more prominent symptoms. The pain varies greatly in its location, amount and constancy, but it was complained of by almost every patient. In some cases it was persistent, either mild or severe; in others paroxysmal, the attacks recurring at irregular intervals, and in two it regularly followed ingestion of food. Distention and constipation occurred in about one-half of the cases. At times the former was very marked and was present with both dilatation and stenosis of the bowel. The constipation was seldom obstinate, and unless there was a septic peritonitis it could be relieved by enemata or purges. At times it alternated with attacks of diarrhoea, and twice the latter was severe. A tumor was made out through the abdominal wall twenty-eight times. It was usually of a large size, irregular in outline, movable, at least with respiration, dull upon percussion, and hard, although frequently areas of softening could be felt. Exceptions were common. It was felt through the rectum six times and once vaginally. Among other symptoms often noted were: Fever (twelve times, three of which were with septic peritonitis), and which ranged from 90 or 100 degrees in the morning to 101 or 101.4-5 degrees in the evening, the latter being the highest temperature in an uncomplicated case; vomiting (eleven times) occurred only in those cases in which the bowel was nearly occluded, or in which septic peritonitis had devel-

oped; œdema of the legs or scrotum (six times), due to pressure upon the vena cava or other veins.

There were symptoms of marked stenosis or bowel obstruction in nine cases; in four of them intussusception with the tumor at the apex had taken place; in one, cicatrices of old tubercular ulcers, caused stricture; and twice, folds of mucous membrane almost obliterated the lumen. In six leucocytosis was mentioned, but as septic peritonitis was always present, this is probably not a characteristic symptom of sarcoma. The number of red blood corpuscles was normal in one patient and was reduced about one-half in another.

The prognosis is exceedingly grave, thirty-four deaths occurring in the series and one patient was only temporarily improved by an entero-enterostomy. A bowel resection for malignant disease is always a dangerous operation, and when combined with the difficulty in making an early diagnosis, this high rate of mortality can be easily understood. Twenty-six cases were operated upon, eleven being exploratory incisions in cases which were either inoperable or showed a septic peritonitis, and in which the tumor was left alone. In fourteen cases the tumor was removed by resecting the intestine, with six deaths, a mortality of forty-three per cent. These statistics may appear more favorable than they actually are, as the report of one of the recoveries was made twenty-four hours after operation and another was discharged "cured" in two weeks. Twice, the time elapsed was not given, but in one it was evidently a considerable period, as mention is made that no stenosis had followed the intestinal suture. The longest period of good health reported after resection was eight years, the patient then succumbed to an attempt to close an artificial anus made at the original operation. Willy Meyer records one patient as being well at the end of one and one-half years.

I have not seen any mention of a recurrence. They are doubtless possible, but recovery from the primary growth is so unusual that a recurrence must be exceedingly rare indeed.

In closing I wish to draw the following deductions:

1. Sarcoma of the intestine is seldom met with, as statistics, both post-mortem and operative, show.
2. Its favorite location is in the small intestine, unlike carcinoma and like tuberculosis. The rectum is, however, a not uncommon exception.
3. There are no characteristic symptoms, but the age, ca-

chexia, irregularity of the bowels, distention, abdominal pain and tumor should arouse suspicion of it.

4. The prognosis has been almost hopeless, but enough have recovered through operation to show that with more careful diagnostic methods, and, especially, earlier exploratory laparotomy, the rate of mortality can be reduced.

5. Excision of the tumor is the only curative method of treatment, but arsenic has apparently delayed the course in some cases, especially lympho-sarcoma.

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DISSEMINATED SYMPATHETIC CHORIDITES.—Henry Copper gives a review of the literature of this very rare and interesting disease and cites two cases in detail that have come within his personal observation. He states that the affection manifests itself by the appearance of little, round spots of yellowish color in the periphery of the choroid. These are very small, measuring scarcely 1-10 of the papillary diameter; they are of nearly equal dimensions, but at times some become confluent in such a way as to form a focus of some size with festooned edges. They are to be found more particularly near the branches of the retinal vessels, which often cross them. Their border is regular—not encircled by pigment. There is generally little effect on the neighboring parts. The papilla is slightly hyperæmic; the veins are more or less dilated. The vitreous body remains transparent. The iris does not present anything special; there is sometimes a little Decemetitis. Parakeratitic injection is absent or very slight. After several months these deposits disappear, leaving behind no traces, or they become atrophic; they bleach, but without abnormal pigmentation; others persist without modification. The prognosis is favorable. The majority of cases known have recovered. Atropin and mercurial injections are recommended, and above all, a prolonged sojourn in a darkened room.—*The Ophthalmoscope.*

A COMPARISON OF THE PHARMACOPŒIA OF THE DOMINANT AND
HOMŒOPATHIC SCHOOLS OF MEDICINE, WITH A DISCUSSION OF
ONE OR TWO REMEDIES CONTAINED THEREIN.

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(Read before the Homœopathic Practitioners' Association of Reading).

Upon September 1st of the present year the United States Pharmacopœia goes into effect, and because of some certain and special changes, much comment has been made upon the new work. The seventh edition of the *Homœopathic Pharmacopœia* is already in effect. All well-informed physicians, regardless of school, should be conversant to an extent with the official materia medica of his own and other schools of medicine. Few, however, take sufficient time to make good, honest study and comparisons, and consequently many misunderstandings have arisen.

Thus, the dominant school say that lycopodium clavatum is absolutely inert in therapeutic action, while the homœopaths find great virtue in it. Why is this? Because the dominant school uses the material raw, while the new school grinds the sporules for hours until the oil contained therein is expressed (this oily matter has been found to represent forty-seven [47] per cent. of the material). This procedure the allopath is not familiar with in regard to the drug, which explains his ignorance as to the remedial value of this drug.

On the other hand, the homœopath often accuses his old-school brother of overdosing his cases, when often the *average* dosage is very nearly the same under both systems (especially when using such drugs as Potassium, Iodide, Digitalis, Passiflora, etc). Many of these mistaken views could be corrected if all physicians would endeavor to honestly enquire into the merits of substances in dispute and make a fair comparative study of them. (Of course, we know that much overdosing occurs in the old school, but when making such charges we should be specific and well able to prove our statement.)

The object of this paper is to make some honest comparisons of two editions of the Pharmacopœia of the two schools of medicine, and to outline comparatively the accepted use of one or two important remedies.

To begin with, we may state that the U. S. P. of 1890 contains 1,005 official substances, the list embracing plasters, ointments and chemicals, as well as truly curative agents,

such as aconite, belladonna, etc. The homœopathic edition (fourth edition) contains 689 substances, ALL of which are truly curative agents. No plasters, ointments, etc., are official in this volume.

The differences found so far are:

(1). The U. S. P. has 296 more substances than the homœopathic edition, but of this number, to say the least, 143 are non-curative (plasters, chemicals, sedatives, etc.), leaving still 133 substances in excess of the edition of the new school.

(2). Many old-school drugs come in several preparations: for instance (a), 7 of almond, *i. e.*, bitter almond, essence of, oil of spirit of, and water of. Sweet almond—emulsion of, expressed oil of and syrup of.

(b.) Colchium (six preparations).

Root—Extract of.

Fluid extract of.

Wine of.

Seed—Fluid extract of.

Tincture of.

Wine of.

(c). Digitalis (4 preparations).

Extract.

Fluid extract.

Infusion.

Tincture.

(d). Ginger (5 preparations).

Fluid extract.

Oleo resin.

Syrup.

Tincture.

Troches.

This list can easily be added to, but the number given is sufficient to prove the statement.

(3). Counting all told, the total number of several preparations of the same substances as above explained, we find 323. Adding the 143 non-curative, we have 466 to deduct from the 1,005, leaving but 439 drugs which the allopaths themselves can claim to be curative.

(4). While at first glance one might think our contemporaries have more curative drugs at command, we find they have

but 486 distinctly curative drugs, as against 689 in the homœopathic list of curative drugs, leaving a difference of 203 in favor of the latter.

Coming to the present editions we find that the allopaths have added 122 and dismissed 170 drugs, leaving 957, a loss of 45. The new homœopathic pharmacopœiæ has 782, as against 689 formerly, a *gain* of 93. The bulk of substances in the two pharmacopœiæ remains in about the same relation, the latter having about as many more distinct substances as it did formerly, *i. e.*, 203 more than the old school. Therefore this paper will not be burdened with so many figures.

Some drugs which were dismissed from the U. S. P. are absinth, allium, arnica radix, bryonia, caulophyllum, chelidonium, dulcamara, extract of (1) arnica radix, (2) cinchona, (3) lobelia, (4) podophyllum and fluid extract of dulcamara. Citrate of magnesia, phytolacca fructus, *pulsatilla*, *rhus tox.*, sambucus, tabacum, tanacetum. Tincture of arnica radix, of bryonia and of cubeb.

Some drugs added to the U. S. P. of 1900 are:

Aqua hamamelidis,
Berberis,
Bismuth sübgallas,
Colchicine,
Emplastrum adhesivum,
Fluid extract of sanguinaria,
Fluid extract of staphisagriæ,
Guaiacol,
Strychnia nitras.

The greatest change made in the 1900 edition of the U. S. P. is the change of drug strengths to a standard, which standard is very nearly the one recognized by the homœopaths for years. The U. S. P. drug strengths have been practically reduced to two classes, *i. e.*, ten and twenty per cent. Average doses have for the first time appeared in the American Pharmacopœia.

A glance at a few U. S. P. drugs and their dosage should set the homœopath to thinking. Here are a few:

Calomel, 1 gr. (alterative dose).

Fowler's solution of arsenic (1 per cent., *i. e.*, equal to our 2 x) equals 3 minim dose.

Merc. jod. flav, 1-5 gr.

Merc. jod. rub., 1-20 gr.

Nux vomica, 1-4 gr.

To prove that the dual action of drugs is recognized we quote:

- (1). Calomel (alterative), 1 gr.
Calomel (laxative), 2 gr.
- (2). Ipecac (expectorant), 1 gr.
Ipecac (emetic), 15 gr.
- (3). Lobelia (expectorant), 15 minims.
Lobelia (emetic), 3j.

Of course, the doses of many drugs remain bulky, but a glance will show quite a number in minims and grains and fractions thereof.

It should be gratifying to every homœopath to see the real trend of thought (whether *credit* be given to the school or not) evidenced by the standardizing strengths of tinctures into classes, by the small official dose, by official recognition of the *dual action* of at least certain drugs.

It might be interesting here to make a brief study of one drug retained in, and one dismissed from the U. S. P., and in this study to try to see why action was taken in each case. No more prominent remedies could be selected than ipecac and pulsatilla, both of which remedies were proven by Hahnemann and the pathogeneses *printed* years ago. Pulsatilla was dismissed. Ipecac was retained.

Pulsatilla.—According to Bartholow, one of the revisers of the U. S. P. 1900, the "Local effects of pulsatilla are those of an irritant, and after prolonged contact even caustic effects are produced." (Compare catarrhal affections of acute form, nose, throat, etc.) "On the intestinal mucous membrane it has pronounced irritating effects" (showing special affinity for that tract). "Depression of the heart's action, lowering of the arterial tension and declination of temperature are caused by pulsatilla" (chilliness). "Therapy.—Owing to the irritating action of pulsatilla, it is not suited to the treatment of gastro-intestinal disorders, especially when a state of inflammation exists." (However, although an irritant, he allows it to be used in other irritative conditions, as in nose, throat, etc., *i. e.*, acute (irritative) catarrhs. If used one place curatively, where it will cause local irritation, why not in another place?) He

further states, "Notwithstanding this local irritant effect, homœopathists employ it for the relief of dyspepsia and the accompanying mental symptoms; but, in coming to conclusions as to its curative value, they calmly ignore the natural history of these maladies."

He now states, "Pulsatilla is adapted to the treatment of acute inflammation of the nasal, faucial, laryngeal and bronchial mucous membrane—acute catarrh" (all of which membranes he speaks of it as a curative measure when already irritated. Where is the explanation, excepting that given by homœopathy?). The dose of pulsatilla is from 1 to 20 minims. This dose is too large and, of course, irritates the stomach.

It is hardly necessary to say much in regard to the homœopathic usage of the drug, for he gives a partial pathogenesis of the drug. As far as he goes he recommends its use under the law of similars.

Ipecacuanha.—According to Bartholow, "Administered by the stomach in small doses (from one-eighth to one-quarter of a grain), ipecacuanha acts as a stomachic tonic, and probably increases the gastric secretions. In larger doses (from five grains to a scruple), it is a nauseant and emetic" (recognition of large and small doses).

"Like other nauseants and emetics, ipecac increases the secretions of the broncho-pulmonary mucous membrane, and is, therefore, held to possess expectorant properties. More than any other agent of the class, it relaxes the skin and promotes cutaneous transpiration." (If you will notice, he ascribes to ipecac the power of *causing* accumulation of mucous. On page 743 he also claims it useful in mucous accumulations.)

Extract from page 743 (Bartholow): "Certain acute affections of the broncho-pulmonary mucous membrane are much benefited by non-emetic doses"; (small doses) "for example, acute catarrh of the nasal and bronchial mucous membrane, hay asthma, capillary bronchitis. . . . Non-emetic doses of the fluid extract (m j.—m iij) diminish the violence of the spasms of this disease. . . . A troublesome cough at night, which prevents sleep, may not unfrequently be arrested by a dose" (a single dose, mind you) "of some one of the ipecacuanha preparations."

On page 733 he shows that in post-mortem examinations, after lethal doses, much "gastro-intestinal irritation is found."

"The lungs are sometimes seen to be hyperæmic and presenting patches of hepatization, and sometimes exsanguine, but the former condition is more frequently observed." (Causes hepatization of lungs and gastro-intestinal irritation, and on pages 741 and 742 claims it a cure for the same, *i. e.*, (1) hæmorrhage, page 742; (2) dysentery, page 741.

Dysentery.—"Epidemic dysentery, especially of malarious and tropical countries, is the form of the disease to the cure of which ipecacuanha seems best adapted. The author has used it with much success in acute dysentery, as it occurs in the interior valley of this Continent. When the characteristic ipecacuanha stools are produced, the tormina and tenesmus cease, etc.

Every physician and most of the laity know of ipecac as an emetic. The homœopaths have used it for years to cure nausea, etc. Yet on page 741 Bartholow says: "It has long been known that ipecacuanha, in small doses, has the power to arrest certain kinds of vomiting. . . . A minim of the vinum ipecacuahnæ, given every half hour or hour in a little water, will sometimes relieve these cases in a very remarkable manner.

Hæmorrhage.—He has already shown the power to produce hæmorrhage. He now says: "The evidence is conclusive that ipecacuanha possesses very valuable anti-hæmorrhagic powers. It has been successful in hæmoptysis, epistaxis, menorrhagia, post-partum hæmorrhage, etc."

As homœopathy claims that a condition similar to the drug effects are produced is curable or benefited by the use of the similar drug, we need not give the homœopathic side, as a pretty fair proving (though not in minute detail) has been given by our friend Dr. Bartholow as above quoted.

Conclusions.—Having discussed the matter thoroughly, let us draw some conclusions from this presentation.

1. In the first place, the U. S. P. is revised at stated periods by the best representative men of the dominant school. With its publication it becomes official throughout the land.

The homœopaths do not revise their pharmacopœia at any stated period, which at first glance may look negligent, but let us remember that our dosage varies according to the necessity of and idiosyncrasy of each individual case in question, and not according to any set average. Then, too, a drug once *proven* stands the tests of decades. The system is under a law

and a law changes not. But it is well to have new editions, reviewing the old work and making addenda from time to time, and it is best that such work should be done by only the best men of the school, officially elected or appointed to perform that office.

2. In the second place, the U. S. P. presents many less (over 200) drugs that even may be termed curative by their own authority.

3. This shows that, in reality, the new school man has more curative measures at his command.

4. In regard to the remedies discussed, it can readily be seen that the one dismissed was not given in doses small enough to avoid irritation, so was not used to its best advantage, and for that very reason was found of so little service that it was discarded. The drug retained was most carefully looked into and small (non-irritative) doses considered. In fact, it was practically homœopathically proven by the old school.

These same statements hold good of many other drugs and can just as readily be proven, that when the allopath does carefully prove (test) his drugs he comes to practically the same conclusion as his brother of the new school.

5. In conclusion, let me say that we should always study comparatively the two systems, fairly criticising, and we will learn to love, honor and obey the homœopathic laws, and to refute many ignorant statements continually made by both sides. It was very much for this reason that the author undertook to compare the pharmacopœiæ as being standard and representative, and it is sincerely hoped that we are more proud than ever of our school.

THE EFFICIENCY OF SALICYLATE OF SODIUM IN INFLAMMATORY EYE DISEASES.—H. Gradel declares that the disease in which salicylate of sodium has proven itself superior to any other therapeutic agent is irido-cyclitis due to traumatism with infection, as well as in sympathetic disease secondary to it. The writer has watched sympathetic inflammation from the day of the start to its termination in three patients treated by salicylate of sodium. All three recovered with perfect sight. He knows that the first remained well at least five years, the second nearly three years, while the third died, with sight intact, nine months later. Even in so small a number of cases in a disease so dangerous to sight, invariable recovery is the strongest possible proof of the efficacy of the treatment.—*The Homœopath Eye, Ear and Th. Jour.*

THE ROLE OF WATER IN ARTHRITISM.*

BY

W. H. A. FITZ, M. D., PHILADELPHIA, PA.

(Read before the Germantown Medical Society.)

The maladies which the human flesh is heir to may be divided into two classes:

1st. Those due to microbic infection.

2nd. Those resulting from an abnormal circulation, or, to speak more correctly, from the presence in the circulatory systems of abnormal matters of organic or inorganic origin. The matters of organic origin may be simple alterations in the properties of the normal cells or fluids, such as may happen after exposure to damp; those of inorganic origin doubtless come from mineral salts, introduced principally with the drinking water. They are found in the system as urates and oxalate of lime. The existence of the former is manifested by rheumatism; that of the latter by gout, gravel and calculi.

We are particularly interested in the latter group, because they can be prevented and cured.

GOUT.

Various attempts have been made, at different times, to find a bacterial origin for gout, but without success. All indications point to a non-bacterial origin. Among these indications are the following:

Gout (arthritis) was originally attributed to the deposition of acrid humors on the articular surfaces.

Modern medicine, better informed, attributes arthritis to a perturbation in nutrition—an affection, at first general and diathetic, that reveals itself, after a long period of time, by pains in the articulations, followed by chalky deposits.

The first attack manifests itself generally in the big toe, and little by little in all the articulations. The attacks, first irregular in intervals, become more and more frequent, the articulations becoming clogged and deformed.

Among the men who have made a special study of the subject Dr. Lecorche may be cited with interest. He says:

“Two contradictory theories have been advanced to account for gout. One attributes it to subnutrition, the other to hypernutrition.

*Translated from the French by P. A. Maignen

"There is one particular characteristic which is always clearly defined—the deposits which form in the affected parts, and which, according to certain authors, have the appearance of chalk, and, according to others, that of gypsum. In both cases it is recognized that lime is combined with organic acids, principally in the form of urates."

Dr. Lecorche goes on to say: "From infancy to old age the malady (gout) is characterized by manifestations which vary with every age. In childhood and youth by epistaxis (periodical nose bleeding), headache, migraine.

"A little later, hemorrhoidal discharges, neuralgia, palpitation, gastric troubles, flatulency, acidity, epigastric heaviness, gastralgic cramps, lazy digestion and eczematous eruptions.

"In adult age appear perturbations in the digestive functions, hepatic torpor, urine charged with uric acid, asthma, nephritic colic.

"Among other manifestations affecting the nervous system must be mentioned vertigo, sciatica and, lastly, the articular attack.

"Later still supervenes the serious attack of cerebral gout, gouty nephritis, angina pectoris and fatty degeneration of the heart."

We thus see that gout affects every part of the system in characters that are so distinct that it has been possible to distinguish five dissimilar types.

1st. The Articular type: Pains and deposits in the articulations.

2nd. The Nephritic type: Nephritic colic, gravel, vesical calculus.

3rd. The Muscular type: Represented by rheumatic gout, migraine, sciatica.

4th. The Neuropathic type: Asthma, spinal affections.

5th. The Hepatic type: Dyspepsia, sluggishness of the liver.

If we try to find which temperaments are most favorable to the development of gout we find that there are none in particular. Durand-Fardel speaks of gouty patients that are plethoric, neuropathic and lymphatic.

The nature of the gouty deposits is clearly defined. They are urates of soda, urates of lime and phosphates of lime. These deposits form concretions of whitish matter or incrustations on the cartilaginous tissues, which increase little by

little and form small masses, to which has been given the name of nodosities (because they resemble the knots of trees). These masses or deposits which deform the members do not form IN the cartilaginous tissues proper, but ON their surfaces.

Bentley-Todd has observed such deposits, sometimes called tophaceous, in the kidney. Charcot describes two distinct forms of renal lesions, in gout:

1. Nephritic gout, gravel.
2. Interstitial nephritis.

In the venous or arterial system deposits of this kind determine serious accidents, sometimes in the form of lesions on the sheath of the vessels, with varicocele and phlebitis, and sometimes atheroma or arteritis.

To these must be added cardiac lesions of several kinds, one of which—the most frequent and clear type—is fatty degeneration of the heart.

Even the respiratory organ does not escape. Roering has observed gouty concretions in the lungs of an old man, the most frequent pulmonary lesions in such cases being Emphysema with chronic catarrh of the bronchia.

This ubiquity of the deposits in gout reminds us of what takes place in tubular boilers fed with hard water. It seems as if the animal machine were apt to be incrustated in all its parts like the industrial machine.

It is well known that boilers, fed for a certain time with hard water and having become gradually incrustated, clear themselves of scale when temporarily fed with soft water for a short time.

May we not suppose that there is some analogy between the animal and the industrial machine in this respect?

One thing is certain, the mineral salts must enter originally through the alimentary canal. They are not conveyed by the solid food, which is derived from the vegetable and animal kingdoms. They must enter as impurities in water or other beverages, or with adulterated food.

When bacteria enter the system they multiply indefinitely. Their action is slow or acute, according to their kind and the location in which they are found.

In the case of impurities of an earthy nature, they do not multiply in the system; they accumulate.

Dr. Burlureaux, in his work on Tuberculosis, says: "If we consider the distribution of tubercles in acute tuberculosis, we see that it is the blood which has deposited the pathogenic

agent along the vessels, as it might have deposited inert powders; with this difference that the bacilli multiply on the spot, whilst the inert powders do not multiply. The bacilli bring about the appearance of tubercles when the vital resistance is insufficient; the inert powders sometimes become encysted within a sac which presents the outward appearance of a tubercle."

WATER CONSIDERED PHYSIOLOGICALLY.

The object of digestion is to transform the ingested food into assimilable juices, to repair the losses of the organism and to supply it with the materials necessary to its growth. All the solid food we take, in order to go into the blood, must be transformed, first, into a kind of pulp, which, mixed with water, constitutes what is known as "Chyle," which, later on, is carried by the circulatory system to the various parts of the body.

We can then, from this description, understand why water occupies the first place among the diverse elements necessary to sustain life.

An adult in good health consumes on an average each 24 hours:

		About
Water	2,818 grammes	6 lbs. 3½ oz.
Minerals	32 grammes	1 oz.
Albuminoids ..	120 grammes.	4 oz.
Fat	90 grammes	3 oz.
Hydrocarbon .	330 grammes	11½ oz.
	<hr/>	<hr/>
	3,390 grammes	7 lbs. 7 oz.

The water or moisture (7 lbs. 7 oz). is not exclusively supplied by drinking water, which, by itself, varies from 1½ to 2 litres, but also by the moisture which is in the solid food, and is known as water of crystallization. This moisture averages about 1.76 pint.

The necessity of water for the maintenance of life is proved by many facts, and it is well known that men and animals suffer more from thirst than from hunger. Men have been able to fast a long time, depriving themselves of solid food, but they have not been able to live without absorbing some liquid.

Now, the question arises, Is it necessary that the water for

drinking should contain any dissolved mineral matter? Having given the question a great deal of attention, the writers are disposed to say, no! The natural water is that which falls from the clouds. Rain water is aerated and, if collected some time after the first showers, on clean surfaces, it is perfect.

The next best water is that which, having fallen on granitic soil, does not come in contact with the limestone or other soluble minerals and remains soft in the ground or in lakes. Such are the waters of Scotland.

The system can tolerate a small portion of earthy salts, but it must be said, the less the better.

The mineral salts needed for the formation of bone and other constituents of the body are supplied in sufficient quantity by the natural solid food. Prof. Armand Gautier has shown that the solid articles of food contain a proportion of mineral salts which is more than sufficient for all our needs.

The following is an analysis of the ash of solid food:

Food.	Potash.	Lime.	Magnesia.	Soda.	Sodium Chloride.	Phosphoric Iron.	Acid.
Cows' milk.....	23.46	17.34	2.20	6.96	4.74	0.47	28.04
Broth	43.19	17.34	2.20	6.96	4.74	0.47	26.24
Muscular flesh..	39.40	1.80	3.88	4.86	1.47	1.00	46.74
White of egg....	27.66	2.90	2.70	12.09	39.30	0.54	3.60
Yolk of egg.....	10.70	13.62	2.20	1.08	9.12	2.30	60.15
Wheat	39.51	1.97	6.60	0.45	9.12	1.38	62.59
Beans	34.76	5.91	6.43	3.98	3.71	1.05	34.50
Potato	51.21	3.35	13.58	3.98	2.41	1.05	14.91
Asparagus	22.93	15.91	6.34	2.27	7.97	5.00	18.32
Salad	22.37	10.43	5.68	18.50	15.09	2.82	9.39

The mineral salts thus distributed in the solid food are assimilable and sufficient for the formation of all the tissues, whilst those which are found in drinking water are not assimilable.

The phosphate of lime which is contained in cows' milk is assimilable, but bicarbonate of lime (chalk) and sulphate of lime (gypsum) which are in hard water can be of no use in building up the body. On the contrary, being insoluble salts, they are carried by the circulation as already pointed out, and deposited without assimilation in the tissues which they congest.

The role of water as a beverage is to help the chemical phenomena which go on in the body either in dissolving the materials which are to enter into the circulation or in acting as the vehicle for the elimination of waste products. Water also plays a strong contributory part in certain disintegrations and fermentations.

To play such a complex role it is evident that it should be as free from foreign matter as possible. If it be charged with mineral salts it cannot help hindering the normal action of the food and in the case of the sick or the weak the result may be disastrous.

The feeding of many sick is confined almost exclusively to broths and tisanes. We have seen that the meat broth contains no lime nor magnesia. The lime salts have been boiled out and precipitated, hence it is that broth is easily digested.

DIALYSES.

We know that water is a dissolving element of the highest power; whether it acts quickly as when brought in contact with common salt or slowly as we can see all around us.

Think of the grottoes or caverns in which the water pierces the hard stones; see how the stone is dissolved, atom by atom, and carried at a distance where it is deposited as stalactites and stalagmites, transforming shapeless caverns into marvelous palaces with most fantastic and admirable natural architectural effects.

Water acts on the metals in the same way, by oxidation first and afterwards by solution. Little by little, it destroys and carries away the works painfully erected by man.

The dissolving action of water is conspicuous in the phenomenon observed by Graham and known as Dialysis. The principle of this phenomenon is this: If we mix together separate solutions of a crystalloid, that is, of a mineral or organic salt capable of crystallization, and a colloid—that is, an organic substance such as albumin, gelatine or gum, incapable of crystallization, we thus obtain a liquid of a somewhat heavy density. If we deposit it by means of a pipette or otherwise, carefully at the bottom of a receptacle, filled with pure water, a curious phenomenon occurs. Little by little the crystalloid matters pass into the water and are entirely separated from the colloids, which are thus practically purified or isolated. This phase of the phenomenon is called DIFFUSION.

The same phenomenon may be shown in another manner. If we place the mixture above alluded to in a cylinder, the bottom of which is closed by an animal membrane (parchment), and if we introduce this cylinder into another vessel full of water in such a way that the two liquids cannot communicate, except through the parchment, at once a double current is going to

take place in the apparatus which separates the saline from the colloid matters. The pure water, going through the pores of the membrane, will, by DIFFUSION, dissolve the crystalloid matters. This form of the current is known as *Endosmose*. Then another current will form in the opposite direction. The water, charged with the saline matters, will tend to escape by DIFFUSION, through the pores of the diaphragm (parchment), and will mix with the rest of the pure water. This second form of current is known as *Exosmose*. Thus, in a continuous manner, the pure water will come in to dissolve the saline particles of the mixture and carry them out.

The combination of these operations is called DIALYSIS.

After a short time the colloids will be entirely deprived of all the saline materials that polluted them.

The conclusion to be drawn from this phenomenon is that when pure water is brought in direct contact with a mixture of colloid and crystalline matters it separates and carries away the latter by DIFFUSION.

Upon these natural laws may be established a special system of Therapeutics:

We must admit in principle, and this has been clearly proved, that the lime and other mineral salts introduced with the water have an unfavorable action on the functions of the human organism. When taken up by the blood current—which is mostly composed of colloidal matters (albumin about 20 per cent.) they (the mineral salts) will go and be deposited in all parts of the body, principally in the articulations where the circulation has to bring the most repairing materials. If, in such an organism, we introduce, by ingestion, pure water, we will extract by DIFFUSION these mineral salts, which will thus be eliminated by the natural emunctories—the kidneys and the bladder. The chalky deposits will be in part dissolved and removed in this manner, and in part by dialysis, by means of the bath in pure soft water.

WATER IN THERAPEUTICS.

Bouchardat (in *Le Nouveau Formulaire Magistral*) says: "Water is the ordinary vehicle of nearly all the diuretic drugs. We have seen that several sudorific drugs owe their property to nothing but their vehicle. So we may say of many diuretic drugs that they act as such only because they are administered dissolved in large quantities of water.

"If we examine carefully the great number of drugs recommended as lithontriptic, we are compelled to recognize that they owe their action to the water which they contain. The alkaline drugs have another action. They help to dissolve the calculi and uric acid. But even in this case, it is necessary in order to produce the best results, that they be administered in plenty of water. It is only thus that the urines will flow less charged and will be able to dissolve some parts of the stone formed."

On the same subject, Bouchardat continues: "When the urine contains much uric acid the indications for alkaline treatment are precise and good results may be expected, but certain conditions must be observed. The first is to diminish the cause of production of uric acid in prescribing exercise and a sober diet. The second is that the alkaline salts shall be administered in a large quantity of vehicle (water)."

"What would happen in case bicarbonate of soda were prescribed without attention to the regimen of the quantity of water?"

"The nature of the urine would change from acid to alkaline. Instead of depositing uric acid it would deposit phosphate of lime, ammonio-magnesium phosphate or carbonate of lime. The only change would be in the nature of the calculous deposits.

"We cannot repeat too often that good *water is the best lithontriptic for uric gravel*.

"When alkaline salts are prescribed it is not necessary that the solutions be as concentrated as they generally are, because drinks that are so strongly drugged are not easily absorbed, and because it is not possible to take each day a sufficient quantity without disgust or inconvenience. Thus I think," says Bouchardat, "that Vichy water is richer in alkali than is necessary. One gramme of bicarbonate of potash per litre of water is sufficient."

"The good results obtained by drinking certain mineral waters, to combat gravel, must be attributed to the fact that these waters are easily absorbed by the stomach and that the patients can drink a great deal of it."

THE EFFECTS OF HARD AND SOFT WATER.

Mr. Armand Gautier, Professor of Chemistry at the Paris Academiè de Medicine, says: "The ordinary drinking waters

too rich in lime salts are easily recognized by their flat earthy flavor, which strikes unfavorably the taste and disposes the stomach to bad digestion. Mixed with meat and vegetables these salts combine with the albumin, the fats, the oxalates etc., and form insoluble combinations which are incrusting and indigestible. The waters that are too calcareous do more than hinder the good cooking of the food and check the action of the gastric juice; their nitrogenous compounds, their sulphates, if they should contain some, constitute a medium which is unfavorable to digestion. When reaching the big intestine these salts may be reduced and give birth to sulphuretted hydrogen and perhaps nitrites which are resorbed by the blood."

Since Hippocrates the medical art has attributed the formation of vesical calculi to the use of hard water. Zimmerman has drawn attention to the evil resulting from the use of well water containing salts of lime. At Avignon (France) there are two water supplies, one from a spring heavily charged with bicarbonate of lime, the other comparatively soft. It has been noticed that there were always a much greater number of patients at the hospital from the hard water district than from the other.

Hassal says: "Hard water is dangerous to drink because its power of dissolving the food is attenuated. It is absorbed by the gastro-intestinal mucous membrane with more difficulty than soft water. It is essentially detrimental to digestion."

Todd-Thompson says: "The best beverage is water. The less foreign matter it contains in solution the greater its solvent qualities. Hard water, whatever its origin, from a spring, a pump or a well must be rejected."

John Sutherland says: "Hard water tends to produce visceral obstructions; it diminishes the natural secretions, produces constipation and irregularities, and endangers health. I have frequently experienced the disappearance of these disorders on quitting the town and their reappearance immediately on my return."

Dr. Lecorche points out that the climate has nothing to do with the cause of gout. Thus, in Scotland and Ireland, this malady is practically unknown (only two cases in thirty years in the hospitals of Edinburgh and the patients were English workmen); whilst in England, the climate of which country is not materially different, gout and arthritic disorders are very prevalent.

"Alcoholism," says the same author, "has nothing to do with gout, as in Poland and Scotland, where alcoholism is rampant, there is no gout."

The only factor that can explain this difference is the fact that in Scotland, Poland and Ireland the water is generally soft, whilst in England it is generally hard.

Heredity has been accused of causing gout. Such is not the case. Gout is no more hereditary than the stick of our grandfather.

Statistics obtained some years ago show that in England out of 522 gouty patients

191 had no gouty parent.

181 had a gouty father.

37 had a gouty grandfather.

Among the 113 others several generations had elapsed since any case occurred in the family.

In France out of 150 gouty people

86 had no gouty ancestors.

24 had a gouty father.

The 40 others had an uncle or grandfather gouty.

The proportion of gouty subjects is much greater in England than in France, probably because the water is harder and the inheritance laws are different. In England the law of primogeniture practically compels the sons to live where the fathers lived. In France the property is generally sold and divided at the death of the parent, so that in many cases the children do not live on the native soil and thus they are not subject to the same local influences.

"As people go away from their native soil," says Dr. Foveau de Courmelles, "less traces of heredity are found. Whoever examines the statistics will find that so-called heredity in gouty disorders can only exist among people who live in the same country and have therefore consumed the same water."

Mr. George Pouchet, Paris, says: "True heredity corrects monstrosities; otherwise we should all be more or less deformed and the beauty of the human race would have long ago disappeared."

MINERAL WATERS.

The mineral waters are so called because they contain mineral salts in solution. Those originally in vogue contained carbonate and sulphate of soda, carbonic acid, lithia, arsenic,

iron, with little or no lime. Other waters which have come on the market since contain bicarbonate and sulphate of lime; also carbonate and sulphate of magnesia and sodium chloride. The first class may be said to be soft and the second hard.

The hard mineral waters, taken habitually, are, as we have already seen, bad; yet taken in large quantities at the spring, under certain conditions and under careful medical direction, they may sometimes do good. Thus, for instance, take the case of a man who during the whole year has lived highly, that is, has been a great eater of an abundance of good things, he goes to one of these hard mineral water stations, he eats as usual, but the mineral salts in the water coagulate and solidify his food so that it does not pass into the circulation, and whilst he is thinking he eats a lot, he actually starves his blood, which is all the better for this temporary waste of food.

Another class of patients may be benefited by a cure at the hard water springs, those suffering from gravel. The irritation produced on the mucous membrane by a copious drinking of the very hard water is so considerable that it may help the passage of the calculi when they are round and in certain places.

This kind of mineral waters, which under the conditions cited above may give temporary relief, should be used with the greatest caution at the spring only and under most careful medical direction. Otherwise the remedy would be worse than the evil.

Thus Dr. Moiro, of Vichy, in his book (*De la Congestion du Foie*), referring to the highly mineralized springs of his own city, says: "The immoderate use of Vichy water, at the beginning of a cure, is more fertile in accidents than the abuse of mercury and iodine."

It is held by the most advanced French physicians that any kind of pure water without mineral salts taken in as large quantities as at the springs would bring about the same relief without any untoward effects.

The Sixth International Pharmaceutical Congress held in Brussels in 1888, after a long discussion carried on by the leading chemists of Europe, passed the following resolution:

"Waters which contain lime or other mineral salts, which are not naturally in the organism, form, with the chyle, an abnormal medium for hematosis (formation of blood). They fatigue the kidneys and incrust the articulations."

Taking all the evidence adduced above into consideration, it can be said that hard water is not a safe thing to drink and it may be sometimes exceedingly dangerous.

TREATMENT OF CHRONIC CATARRHAL DEAFNESS.

BY

G. H. HAAS, M. D., ALLENTOWN, PA.

WHAT are you accomplishing in your cases of catarrhal deafness? What degree of success do you attain? These are questions which one hears so often asked and are questions which deserve a most honest and candid consideration. It is that large group of cases which for lack of a better term we refer to as chronic catarrhal deafness, that in our judgment deserve a frank soul to soul discussion. These cases come to all of us, and form, indeed, a large part of our patronage. So I ask if we are all getting the results we desire, or if we ever get discouraged?

In the treatment of those cases attention must first be directed to the passages that lead to the middle ear. If there is a catarrhal condition of the nose and throat that may have given rise to middle ear diseases—and I have not yet seen a case of catarrhal deafness where such condition of the nose and throat did not exist, it should receive proper treatment, for a permanent cure of the aural affection cannot be effected so long as the exciting cause of such an attack remains in the naso-pharyngeal tract. These cases in their incipency are generally of the hypertrophic type. The swelling of the tissues and the increased tension of the drumhead and vesicles may produce labyrinthal pressure with a sense of light-headedness, giddiness and subjective noises. The hearing varies greatly with the weather conditions. Low barometer and thermometer, with great humidity of the atmosphere, increase the impairment of hearing, the sensation of fulness and tinnitus. It is not unusual for patients to predict approaching weather changes by these phenomena mentioned. So will alcoholic stimulants and colds also increase these distressing symptoms.

As long as these cases are of the hypertrophic type good results will be accomplished by the application to the nose and throat, and the naso-pharynx of a solution of one-half drachm of Churchill's tincture of iodine to the ounce of glycerine, two

or three times a week, and a spray of mentholated alboline several times a day by the patient himself at his home.

Internally the best results are achieved by the administration of one of the following remedies: Calca. jod, calca. carb., ars. jod, hydras, sang. can., kali mur. and Bry. alb. After these cases have been treated for a week or two they show signs of improvement. The tympanic membrane, which was dull and retracted, assumes its lustrous appearance, the dullness of hearing subsiding and the case generally gets well in from three to four weeks.

When the disease has merged into the atrophic and sclerotic stage, for the line of demarkation cannot always be distinctly drawn between the early adhesive and the late hypertrophic middle-ear catarrh, we cannot speak of this form as being generally curative. For we must candidly admit that in otology as in other branches of medicine, there are maladies that baffle the most skilful practice of our art, and all that we can do is to stay the progress of a persistent process. Here the mucus membrane of the nose and throat and naso-pharynx is in an atrophic condition and better results will be accomplished by the substitution for the iodine solution, a ten per cent. solution of ichthyol in glycerine, several times a week.

Massage of the external canal is of undoubted utility. Some six or seven years ago I started the use of yellow oxide of mercury to the auditory canal to relieve the itching that these patients complained of. The result was that it not only relieved the itching, but the middle ear seemed to make better progress than in cases where this application was omitted. The method used is to twist cotton around a probe and saturate it with the yellow oxide of mercury, ten or twelve grs. to the ounce of vaseline. This cotton is rubbed in a circular manner over the walls of the canal and the friction continued just long enough to thoroughly cleanse the skin and stimulate the circulation.

The ceruminous glands, which are generally in an atrophic condition in this disease, are aroused to greater activity. The skin, which is dry, scaly and often eczematous, assumes a healthier appearance, and the effect on the process of nutrition does not appear to be confined to the external canal only, but extends to the tympanic cavity as well.

Internal medicine is of undoubted value in such cases, and the remedies that suit these cases best are generally found among the following: Kali bi., kali mur., hydras., bry. alb.

Now, how long should this treatment be continued? Just until improvement ceases, for too much treatment is pernicious. When improvement takes place and a stage is reached in which the benefit remains stationary, in spite of all efforts for a reasonable time, the treatment had better cease, and the patient discharged with the instruction to return should he begin to lose the gain which had already been made. In this way useful hearing may be maintained and the patient be kept fairly comfortable.

The psychic element which these patients are apt to drift into should not be lost sight of, for it often plays an important role. Two things are necessary for perfect audition, an auditory organ, which receives and records the sound, and a brain, which interprets it. If the brain is not in action, the ear is a sort of useless phonograph without an auditor. Deafness is accompanied in a large number of cases by a certain degree of inattention. The patient, convinced that he cannot hear, ceases to listen, but when his attention is attracted he hears perfectly what has previously escaped him. Under the influence of this inattention there is produced an inactivity—a paresis of the auditory nerve or of the centre through default of exercise, and we should not forget that it is only the worst of the deaf who cannot hear and that we may treat in an effective way the diseases of the will by suggestion and re-education. It is, however, stated that a man may repeat an erroneous statement so often that in the course of time he comes to believe it true. Is it, therefore, possible for some of us, in our commendable zeal, to encourage our patients, to be lured into the belief that we are securing the results which we desire?

THE LESSER CALCAREAS.

BY

ROBERT LOWELL WOOD, M. D., BROOKLYN, N. Y.

THESE remedies, though not thoroughly proven, have attracted much attention of late in the profession, and have given brilliant clinical results. Calc. fluorica and Calc. sulph. are associated with the name of Schüssler, who first brought them prominently into notice: Calc. picrata owes its being to Dr. H. C. Houghton, while Calc. hypophos appears to be without parentage. These remedies all correspond to the Cal-

careia type of patient, departing from it only along special lines, and attacking some specific organ or tissue; hence their field of action is limited.

CALCAREA FLUORICA.

Calc. fluorica was proven by Dr. Bell, but it remained for Schüssler to bring it prominently before the profession. Its field of action includes the blood vessels, glands and bones. Its action on the blood vessels is due to a relaxation of the muscular coat of the vessel, with subsequent dilatation. Thus it is often indicated in vascular tumors, particularly in the first stages of aneurism, which (together with Ferrum phos.) it will hold in check, according to Schüssler, "provided the iodide of potassium has not been taken." It is often useful in cephal-hæmatoma, the special indication being that on pressure over the tumor, the underlying bone is rough and uneven. For varicose veins, with sharp, piercing pains, particularly the varicose veins of pregnancy, it is one of our best remedies. Calcarea fluorica produces induration and swelling of glands, especially orchitis, < in damp weather, like Rhododendron, *but in the Calcarea type of patient*. Indeed, the calcarea type is necessary for the successful prescribing of these remedies, and we must not forget it in considering the second element—Fluoric acid, Phosphorus, or what not—for when given empirically, they only complicate the case, and do more harm than good.

Now, as to its action on the bones: It produces and cures exostoses, when "hard, rough and corrugated," necrosis of the inferior maxilla, roughness of the enamel of the teeth; caries of the nasal bones following the abuse of mercury. I have found it useful in hospital and dispensary practice in numerous cases of felon, and second only to Arsenicum album in frequency of prescription. Unlike Arsen. the pain is localized in the finger, which is extremely painful, with extensive sloughing surfaces, and profuse purulent discharge. The bone will be found roughened on the use of the probe. Schüssler and Bœricke and Dewey claim that the higher potencies act best, but I have used the third decimal with good results. I do not believe that simple surgical dressings inhibit the action of the indicated remedy, and therefore use a 2 per cent. solution of creolin in glycerin, with frequent cleansing with sterile water.

CALCAREA SULPHURICA.

The keynote of this remedy is *suppuration*; suppurative conditions in which an active discharge is present, not when pus is forming or is encapsulated. Its action is similar to that of Hepar., but it lacks the hypersensitiveness to touch, pain and cold air that characterizes the latter, and its sphere of usefulness begins when Hepar has ceased to act, and suppuration still continues. Calc. sulph. is also complementary to Silica, the discharge being thick, yellow and lumpy, in contra-distinction to the thin, ichorous discharge of Silica. Of late years it has been extensively used in ophthalmic work, especially in deep corneal ulcers, with profuse, thick, yellow discharge, and in phlyctenular keratitis or conjunctivitis, when enlarged cervical glands co-exist. Pus in the anterior chamber, or hypopyon, may call for it. We may have the characteristic discharge from any outlet of the body. Thus it is often useful in otitis media, ozæna, leucorrhea; intestinal ulcer, with purulent, slimy stools; cystitis, phthisis pulmonalis, etc

Calc. sulph. has a marked action on the skin, producing various purulent conditions. For example, small cuts or wounds do not heal readily, but suppurate (Hepar); boils or abscesses in any situation, especially about the anus, accompanying anal fistula, are common; and crusta lactea, or chronic eczema of the scalp calls for it when the characteristic thick, whitish or yellow scabs of *Calcareas* form, from under which oozes a thick pus, and which when removed leave a suppurating surface. Schüssler mentions it as useful in carbuncles, but it is greatly inferior to *Tarentula cuben*; *Arsen. alb.*; and *Lach.*, for it has neither the excruciating pains nor the modalities which distinguish them. In short, we might end as we began——suppuration in a *Calcareas* type of patient.

CALCAREA PICRATA

It is an unfortunate fact that Homœopathic physicians are, too often, led by their enthusiasm to make statements concerning the action of our remedies which are not borne out by subsequent experience, and which arise from habits of inaccurate observation or from self-delusion. Particularly is this the case when we consider a new combination of two elements: the remedy is not thoroughly proven; arises usually from the study of one man, and not from that of any body of observers, and presents a curious jumble of contradictory symptoms and

modalities, from which we turn in dismay, declaring that the polychrests of Hahnemann are sufficient for us.

As a brilliant exception to this rule we have the combination of calcarea with picric acid—*Calcarea picrata*, introduced by Dr. H. C. Houghton at the New York Ophthalmic Hospital, after careful study and ample opportunity for observation of its action. It has proven, clinically, almost a “specific” for furuncle of the external auditory canal, to which condition its use is limited. It is a remedy never thought of by many, yet one invaluable for this one condition.

CALCAREA HYPOPHOSPHORICA.

The data concerning this remedy is exceedingly meager, few *materia medicas* mentioning it. Suppuration, ulcerative conditions, especially about the larger joints, call for it, and in some cases of hip-joint disease and necrosis of the tibia it has exhibited wonderful reparative powers. It is essentially a *chronic* remedy, and conforms to the *Calcarea* type very closely, having a discharge similar to that of *Calcarea sulph.*; though the deeper structures are attacked under its action.

NOTES ON MATERIA MEDICA.

CAPSICUM ANNUM.

BY

MALCOLM E. DOUGLASS, M. D., BALTIMORE, MD.

Active Ingredient.—The physiological properties of *capsicum* are represented by *capsicine*, a yellow, thick semi-solid, which melts with heat, and is soluble with difficulty in water, but easily in ether, turpentine and rectified spirit.

Physiological Action.—The local irritant action of *cayenne* pepper is well known; it excites a burning sensation in the mouth and tongue, and, if swallowed, in the fauces and throat. Should this action be carried to intensity severe inflammatory swelling of the mucous membrane is produced, with copious outpour of saliva. In the stomach small quantities excite a gentle and not unpleasant feeling of warmth; very large doses cause severe gastric and intestinal inflammation; the prolonged use of large (though not acutely poisonous) doses diminishes appetite and digestive capacity; these

evil effects, however, are not so readily produced in persons who reside in the tropical countries to which the capsicum is indigenous. Applied to the skin, especially in concentrated solution, capsicum is a powerful rubefacient, and will even blister if applied continuously. As regards the more remote physiological actions of capsicum nothing can be said to be known with certainty. It does not appear, in any dose, to exercise narcotic power, but large doses would seem to increase the perspiration and the flow of saliva, whether by simply producing vaso-motor paralysis, or in some other way, is not known. The sweating of the brow and the salivation, which are immediately produced by a very large dose of cayenne, are probably due to reflex paralysis of the vaso-motor fibres which run with the branches of the fifth nerve.

Finally, it may be mentioned that capsicum is eliminated, in part, in the urine.

Characteristics:

Headache as if the skull would burst; on coughing, moving the head or walking.

Painful swelling behind the ear.

Tenesmus; burning pain in anus.

Stool; mucous; frequent mucus, tinged with blood, causing tenesmus; after drinking.

After every stool thirst, and after every drink shivering.

Cough expels an offensive breath from the lungs.

Shivering and chilliness after every drink.

Homœopathic Therapeutics. Orbital and Auricular Groups

In this range Hahnemann reports the following effects of the drug: A pressing ache in the eyeballs as from a foreign body. Early in the morning, burning in the eyes; they look red and weak. Dimness of sight, early in the morning, as if a foreign substance were floating over the cornea and obscured it. Everything before his eyes looked black. Dilatation of the pupils. In the case of two young men to whom caps. was given for fever and ague, it produced redness of the eyes; the lids, nose and lips were swollen. These symptoms point to the use of caps. in mild forms of catarrhal ophthalmia, especially when complicated with amaurotic symptoms. It may perhaps be well to add that this agent may be particularly serviceable in this form of ophthalmia, if the patient is of a strenuous habit and liable to attacks of this kind.

Capsicum has painful swelling behind the ear, tearing,

pressive pain behind the left ear; pressive pain in the ear, especially felt when coughing. The remedy is indicated in *chronic suppuration of the middle ear*, especially in adults when there is acute, shooting, pressing pain, with bursting headache, great thirst, with chilliness and shiverings. It is of great value when acute symptoms occur in chronic cases, and there is danger of a breaking down of the mastoid cells.

The action of caps. upon the digestive tube is characterized by a series of instructive and valuable symptoms. Hahnemann reports the following symptoms: Altered taste in the mouth, which is as of foul water, or insipid and flat, imparting a taste as of clay (to butter for instance); at times the prover experiences a sour taste in the mouth, and likewise an acrid taste. Heartburn, sometimes preceded by a watery, flat taste. Eructations, only when walking; every eructation is accompanied by a stitch in the side; when sitting down, there is no eructation and consequently no stitch. Coldness in the stomach; sensation as if the stomach contained cold water, followed by a sensation of trembling in the stomach. Anorexia, the food having a natural taste. Frequent yawning after eating. Desire for coffee, but after drinking coffee he feels sick at the stomach, with inclination to vomit. Qualmishness in the pit of the stomach, early in the morning and after dinner, with inclination to vomit. Fulness and anxiety in the chest, after eating, followed by sour risings and finally a loose stool. Burning sensation from the stomach to the mouth, after breakfast. A burning-stitching pain deep in the abdomen, on stooping and when walking; the pain puts him out of humor. Oppressive distention between the umbilicus and epigastrium, aggravated by motion. Sensation as if the abdomen were enormously distended. Distention of the abdomen, followed by headache in the occipital region, and copious perspiration.

The provings show that capsicum may be advantageously employed in diarrhœa, with or without tenesmus. The following effects of the drug characterize its action in this range: Cutting pain in the umbilical region, with discharges of tenacious mucus, which is sometimes mixed with black blood; after every discharge from the bowels he feels thirsty, and every time he drinks he is attacked with shuddering. Slimy diarrhœa, with tenesmus. Diarrhœa, with smarting, stinging pain at the anus.

The symptoms which characterize the action of this drug upon the lining membrane of the urinary apparatus, are of considerable importance. We have: Frequent and almost ineffectual urging to urinate. The urine is emitted with great straining, the emission is rather a dribbling of the urine, and takes place by fits and starts. Burning in the urethra during and after micturition. Stinging in the orifice of the urethra immediately after urination. Stinging in the anterior portion of the urethra between the acts of micturition. The urethra is painful when touched. The urine deposits a whitish sediment. Discharge of a yellowish and thick mucus from the urethra.

These symptoms show that caps. may be useful in catarrh of the bladder, and in chronic gonorrhœa or gleet, although it is not safe to expect much from our drug in this latter affection.

The action of large doses of caps. upon the sexual organs seems to be of a depressing character; small doses produce an opposite effect.

Some soldiers who drank brandy that had been poisoned with *solanum capsicum*, were afflicted with the following symptoms: Loss of sensibility in the testicles, softening and gradual dwindling in those parts. At first this was not noticed by the patients, until the testicles were reduced to the size of a bean, insensible, hard, and drawn up close to the abdominal ring, and suspended by a shriveled spermatic cord.

For years past caps. has been used as a remedy for fever and ague, more particularly when characterized by excessive shuddering and chilliness, pain in the small of the back. An infusion of pepper taken shortly previous to the chill, has frequently prevented the outbreak of the paroxysm.

A characteristic of the capsicum-fever is a sensation of shuddering and shivering after drinking water; the patient feels out of humor and depressed; the attack is not accompanied by those violent signs of congestion which are so often present during a paroxysm of fever and ague, requiring china or arsenicum as their true specifics; the heat and chill may be mingled; the chill is accompanied by anxiety, restlessness, intolerance of noise, inability to collect one's thoughts; the thirst generally occurs before and during the chill, not so much during the hot stage.

COMMUNICATIONS

AS IT IMPRESSES A "REGULAR."

BY

THOS. S. BLAIR, M. D., HARRISBURG, PA.

HAVING a friendly interest in the homœopathic branch of the profession, and having carefully investigated the literature and the methods of the school, a few views from my "old-school" point of observation may be interesting and possibly diverting.

As to size of dose, the average doses of aconite, belladonna, biniodide of mercury, gelsemium, nux vomica or other potent drugs as given on one hand by an average regular in contradistinction to an average homœopath, do not differ in the actual amount of drug given nearly so much as those administered by a "low potency" homœopath in contradistinction to a "high potency" man or "purist." That seems odd, but figure it out and see if it is not true.

As to physiological actions, it impresses *me* a little bit odd, when it comes *my* turn to figure, just how to view a proving made from a dilution or potency instead of from the crude drug. Supposedly, a potency meets homœopathically the crude drug symptomatology and the potency should not produce such symptoms in the healthy except in case of extreme susceptibility. Query: Are provings made from potencies reliable or do the potencies sometimes act according to the generally understood physiological actions?

As a matter of interest, I wish to state that when I want to prescribe in order to get certain physiological actions without imposing a heavy dose of some drug upon my patient I usually use homœopathic preparations. As an illustration: Apis, in the 2x or even the 3x acts beautifully as a non-irritating diuretic; agaricus musc., in the 3x, will restrain secretion from the skin and somewhat from the mucous membranes; rhus tox., in the 4x, is a most powerful alterative, or, at all events, will often do the same thing as the alteratives given in large doses; mercurius vivus, 4x, has severely salivated to my personal knowledge when only a few doses were given; bryonia, 3x, has purged a few persons I could name; one grain of podophyllin,

2x, will give me a bilious evacuation; cuprum arsenite, 3x, is an efficient gastro-intestinal antiseptic; colocynth, 3x, is an efficient anti-spasmodic; lycopodium, 6x, stimulates retrograde tissue metamorphosis and sepia, 4x regulates the portal circulation. Now, I know you do not use these potencies for the reasons I give, but it is surely a matter of interest to determine where the physiological action shades off into what you call the dynamic action. Either you people are getting physiological actions when you least expect it, or I am getting dynamic action when I give my usually larger doses when I don't expect it. Personally, I am not concerned which it is. You or I cure our patients by some drug action neither one of us can accurately define and our patients are not asking for diagrams.

From the beginning of history the human race understood the phases of the moon, but had no adequate conception of the moon itself; but mathematical astronomy has weighed and measured it, the telescope has defined its surface and the spectroscope has shown it has no atmosphere. Today we can tell exactly the action and extent of action of the moon upon tides. From early civilization electrical phenomena were observed, and Franklin and others defined them. Today we harness and measure and make and manipulate this agent and are really coming to understand it. Suppose we were to say Copernicus defined the only law of astronomy or Franklin the exclusive law of electricity?

From the beginning of history men noted the symptoms or phases or phenomena of disease while not understanding disease itself; but we now know that a chemical deposit in the tissues may be disease and we can analyze it or antidote it with our reagents; we can see with our microscopes that certain abnormal cells or certain bacteria may be the basis of disease; we can find that a deficiency of a chemical substance, such as hæmoglobin or an excess of another substance, such as uric acid, may be disease; we can note that certain plasmodiæ growing in the blood stream is disease and we can poison them with quinine, and so on through a large range of conditions. These things being true, does not diminish the old-time value of subjective symptomatology, but it does not make it so necessary to depend upon symptoms, as did our forefathers.

Hahnemann came upon the scene at a time when medical practice was in a bad way. We can take whatever view we please of his law of cure, the fact will ever remain that he did a great

deal to place upon a practical basis symptomatic prescribing. Physicians of all schools can profit much by an intelligent employment of many of his methods.

On the other hand, a few hours ago I saw a beautiful, but at the same time a sad sight. A young lady, three years under the care of a mere symptom-hunting high dilutionist, but now attended by a modern homœopath, who has a microscope and reagents, and who, to the consternation of the family, says truly that the apparently waxen image of a beautiful woman is barely alive and in the last stages of Bright's disease.

All honor to the man who makes an intelligent diagnosis from both the subjective and objective standpoint, be he called by any name he chooses to assume; but I must confess that I cannot but feel sure the successful and intelligent physicians I know who are known as homœopaths feel the same annoyance I do myself when we see bright young lives snuffed out under the eyes of men purposely blinding themselves to what impress us as obvious and vital facts. We "Regulars" don't pay enough attention to the subjective, I admit, but our prejudices arise in some measure from the extreme position of a large portion of the *writers* of your school. Personally, it has been my fortune to be identified with the practical homœopaths, who do not do enough writing and who could do much to break down the unfortunate barriers dividing the profession.

Young men of all schools are passing essentially the same State Board examinations and it is not going to take many years to push accomplishment to the fore and theory to the rear in all schools of medical practice.

THE NEEDS OF SAN FRANCISCO PHYSICIANS.

TO THE HOMŒOPATHIC MEDICAL PROFESSION OF AMERICA:

On the second day of the great San Francisco disaster, President Green, of the American Institute of Homœopathy, wired me asking me to solicit funds for the relief of our stricken brothers in San Francisco and California who were the victims of the now historic disaster. In response to President Green's request I immediately appealed to the homœopathic profession through the several State societies and Associated Press, and have received to date through that appeal \$3,325. Knowing that a local committee could best distribute the fund thus col-

lected, I immediately appointed as such Drs. James W. Ward, Wm. Boericke and C. N. Chamberlain. Of the amount collected \$1,638.50 came through the Homœopathic Medical Society of Philadelphia. I understand that other moneys have been sent directly to Dr. Ward, which did not pass through my hands.

Dr. Ward writes me that the San Francisco College and Hospital will have to be reconstructed and refurnished, and that there is great need of books, instruments, remedies, etc. Nearly all of the transportation companies will carry supplies thus donated to Dr. Ward free of charge.

While the profession has responded liberally, I think that more money ought to be raised. If 10,000 homœopathic physicians in the United States would average \$5 each, a great good could be accomplished. I therefore make a second appeal through the Homœopathic Journals in behalf of our unfortunate, but ever plucky, brethren in California. Donations can be sent directly to me or to Dr. Ward, 2401 Scott street, San Francisco, California. In either event a receipt of acknowledgment will be at once forwarded to the donor, and a full report made to the American Institute of Homœopathy at its coming meeting.

JAMES C. WOOD,
816 Rose Building,
Cleveland, Ohio.

EXHIBITS FOR THE AMERICAN INSTITUTE OF HOMŒOPATHY.

BOSTON, Mass., July 11, 1906.

TO THE EDITOR:

It will be considered a favor if you will kindly insert the following letter into the August number of your journal:

It is the wish of the "Committee on the International Homœopathic Congress" that there be held an educational exhibit which shall demonstrate something of the work that homœopathy is doing along various lines in different parts of the world. With this object in view, the co-operation of all homœopathic institutions, societies and individuals is invited. There will be provided at Atlantic City a large hall in which this exhibit will be held. It will consist of specimens, photographs, charts, drawings, plans of new buildings, illustrations of unusual cases and

demonstrations of work performed. Already more than twenty institutions have signified their intention of participating. The exhibit will be an enlargement of those given in former years by the individual colleges located in Boston, Philadelphia, Cleveland and Chicago. It is hoped that all to whose attention this notice may come will endeavor to do what they can to demonstrate the present status of homœopathy and its accomplishments in the allied branches of medicine.

Further information can be obtained by writing to the secretary of the committee, Dr. J. P. Sutherland, 302 Beacon street, Boston, or to Dr. W. H. Watters, 80 East Concord street, Boston.

THE RECANTING HOMŒOPATH.

MR. EDITOR:

The wave for unification of the profession has carried some of our homœopaths into affiliations into which others of us feel we cannot enter. I would present what follows for the consideration of any who may be wavering upon the issue whether distinctness of homœopaths by name is important.

The cure of which *similia similibus curantur* is the law differs from any that can be attempted in what we technically call rational medicine. I say "technically" call, for, while homœopathy is eminently rational, it is no part of what has come to be technically designated as rational medicine. Here is a definition from the first page of the Introduction to Brunton's Text-book of Pharmacology, Therapeutics, etc., third edition: "Rational therapeutics consists in the administration of a drug because we know the pathological conditions occurring in the disease, and know also that the pharmacological action of the drug is such as to render it probable that it will remove or counteract these conditions." Immediately following this definition is the statement, "Rational therapeutics is the highest branch of medicine." Right here is where we homœopaths take issue with that larger body of physicians who will have it that what they technically call rational practice is the *ne plus ultra* in medicine. We homœopaths say, No: there is a cure which transcends the possibilities of rational medicine, and *similia similibus curantur* is the law of that cure.

In what Brunton defines as rational therapeutics it is impossible to attempt, excepting through an effect in itself knowable, a specified effect *not* in itself knowable; while a specified

effect *not* in itself knowable (*viz.*, a change from what is abnormal to what is normal, or approximately normal, in vital processes) and not secondary to any effect in itself knowable, is the cure of which *similia similibus curantur* is the law.

Let the point just made be clearly presented whenever homœopathy as an issue is under discussion. The real issue discerned, it becomes evident that one may accept both homœopathy and what we technically call rational medicine—the cure he attempts in any given practice of homœopathy differing from any he can attempt in rational medicine. Another thing which becomes evident is that one may, however cordial his acceptance of rational medicine, with propriety identify himself by name with homœopathy, that his position may be known upon the issue which divides the profession, *viz.*, whether what is technically called rational practice is the *ne plus ultra* in medicine, or whether *similia similibus curantur* is the law of a cure which transcends the possibilities of such practice.

Fraternally,

CHAS. S. MACK, M. D.,
La Porte, Ind.

FROM *Medical Ethics and Methods*, by Clarence Bartlett, M. D.: One learns much from the laity concerning the value of a doctor's disposition. While most of the world appreciates candor, they do not like a solemn face. While cultivating a cheerful disposition, one should not cultivate one's sense of the ridiculous at the expense of dignity. We physicians have enough to try us in this respect. With perfect gravity we are obliged to listen to the most driveling details respecting the action of the liver, the laying of the eyeball out on the cheek while the orbit is being carefully scraped, lengthy dissertations on uric acid, etc. Bear in mind the stupendous joke perpetrated by Dr. Osler respecting the chloroforming of persons past the age of sixty, and note how the demon of notoriety still pursues him. It is even said that he now travels *incog*.

THE CIGARETTE HABIT.—At the last annual meeting of the Mississippi Valley Medical Association Dr. W. B. Fletcher, of Indianapolis, protested against the tendency of the profession and parents to ascribe nervous and mental diseases to cigarettes. In the past twenty-two years he had examined over 1,200 cases sent to the Central Hospital for the Insane in which the cause of the malady was given by friends and physicians as cigarette smoking, and in not one instance had he had any reason to suppose that tobacco had anything to do with causing the disease. Many of them smoked cigarettes to excess, but the habit was the result of the mental disease and not its cause. Sometimes cigarette smoking is given as a cause to hide one more shameful.—*N. A. J. H.*

EDITORIAL

THE QUESTION OF AMALGAMATION OF THE SCHOOLS.

The editor of the *Medical Century* is nothing if not a stalwart. When, therefore, he says in his July issue that the question of unification of the two great schools of medicine may be a question for debate at the coming meeting of the Institute and enjoins his readers to be present in order that in future years they may be proud to say that their votes helped to make such unification possible, we feel that the time has come for the HAHNEMANNIAN to give its views of the situation.

There can be but one view concerning the existence of two schools of medicine, and that is one of regret. Admitting an evil to exist, we must study its origin and the causes of its continuance.

When Hahnemann first promulgated his theories concerning the action of drugs and the methods for applying them in disease, he made his ideas public in the current medical journals of his day. With but few exceptions, his teachings were treated with derision, and finally there came a time when he and those who agreed with him were ostracised. Undoubtedly, Hahnemann's strong denunciations of the prevalent therapeutic methods had much to do with the ill treatment he received; and yet who are there of the old school of to-day who will contend that Hahnemann's criticisms were not well founded. Hahnemann and his early colleagues were all graduates of the standard medical colleges of their times; hence their knowledge of the collateral medical sciences must be admitted to have been fully as good as that of their orthodox colleagues; and yet they were excommunicated. With excommunication came the formation of new associations, and, necessarily, the organization of those who held to Hahnemann's belief into separate associations, which became known as Homœopathic. Thus the great quarrel was forced on us, not by us. Looking backwards with the light of the twentieth century, we can see no reason for criticizing the fathers of our school in thus organizing. They were obliged in their desire to better medical

science, to form their own organizations. Had they done differently, they would have been regarded as guilty of quackery.

It may be urged that they were guilty of therapeutic heresy. Were they? Let us ask any well-informed allopathic physician of to-day this question: If with your present knowledge of medicine, you had lived in Hahnemann's time, whom would you have sought as a medical adviser for yourself and family, Hahnemann and his colleagues, or the then existent adherents of the orthodox profession of the day? We believe that one and all must admit that humanity would have been safer with Hahnemann and his friends.

Since those days persecutions have continued. About thirty years ago a slight change in professional sentiment became manifest. It was one of increasing liberality. At the present time there is no official ostracism of the homœopath; but there is very well defined personal opposition to him in many quarters. This opposition or persecution generally takes a very small direction, and did it not occur in a profession which should be liberal, would be unworthy of notice. Several months ago we directed attention to a dereliction on the part of the *Journal of the American Medical Association*. We can name half a dozen other similar smallnesses on the part of others in high places.

It is quite natural then that we hesitate before we abandon our distinctive school of medicine and merge with the allopaths. Indeed, we hardly feel that we should consider the matter, for we have received no official invitation to join with them. As the original quarrel arose from their ostracism of us, we most assuredly are not the ones to take the initiative. We were put out; we got out; and then we established hospitals, colleges, etc., which are acknowledged by our competitors to be admirable institutions. Now, can we discuss the problem of going back with any dignity and self-respect? We believe we cannot until the invitation to do so comes in an official manner to our National Association, the American Institute of Homœopathy, from the American Medical Association.

THE PHYSICIAN'S RESPONSIBILITY FOR THE UNBORN CHILD.

The legal and moral responsibility of the physician for the unborn child are questions which physicians are confronted with almost daily. Every practitioner of medicine is consulted almost weekly by women, both married and single, with the request that he suggest some plan whereby they may be rid of the products of conception. In the vast majority of instances these individuals desire to have an abortion brought about for illegal and immoral reasons.

It appears to be the almost universal opinion among the laity that prior to the time of quickening there is no legal or moral wrong in destroying the life of the fetus. The idea undoubtedly grew out of the precedents of the old English common law, which held that the fetus before the time of quickening had no legal rights whatever and no offense could be committed by an operation which led to the premature delivery of such a fetus. Biologically speaking, such a distinction has no foundation whatever, as the preception by the mother of fetal movements does not prove or disprove the life of the child. From the very time that the ovum is fertilized and begins its growth, the embryo possesses an existence distinct from that of its mother, and though dependent upon her for nourishment and for protection, it is a separate human individual, and not, as Bacon has said, "*a pars viscerum* like the ovary or the appendix." There can be no doubt, therefore, but that any attempt to bring about an expulsion of the products of conception at any period for the sake of convenience or in order to preserve the social reputation of the parents is legally and morally a crime.

There are instances, however, where a physician is called upon to perform an abortion for the purpose of preserving the life of the mother. The laws of most countries and states permit feticide under such circumstances. It is very important that the physician should clearly understand his legal responsibilities, rights and obligations before deciding upon his line of action in such cases. As indicated previously, the courts held under the old English common law that life began, legally, when the child was able to stir in the womb, and prior to that time the child did not exist as being the object of criminal intent or action. Hence, if the mother gave her consent, the operation of abortion could only be considered as a

wrong against something that did not legally exist. During the colonial days, and even much later, in America, the courts held to the same theory. In most States, however, statute laws have been passed which have done away with the old common law and make no distinction between an offense committed on a child before and after quickening. The statutes of most States now provide that any attempt to produce an abortion, either by medicinal or instrumental measures, is punishable by imprisonment, unless the act is necessary to preserve the life of the mother. Should the mother die as the result of the abortion the physician is guilty of manslaughter.

Fetocide is only justified, under the law, where it is necessary to preserve the life of the mother. This provision has grown out of the general belief that the mother's life is worth more than that of the unborn child. Confusion has frequently arisen in deciding what is included in the phrase "necessary to preserve the life of the mother." It is always desirable the advice of two physicians should be consulted before the necessity of an abortion is determined upon, and in many States this is required by the law. It is always necessary to show that the physical condition of the mother renders an abortion necessary. Fear of remote results, such as nervous conditions or possible injury to health, does not justify the destruction of the fetus, and in many States a physician who performed an abortion for this reason could be criminally prosecuted. In some courts it has been decided that the burden of proving the necessity for the abortion falls on the physician, while others have held that it devolves upon the State to prove that it was unnecessary. Under the German law Sipfel states that "in practice, the destruction of the life of the child by the induction of abortion or by embryotomy in order to save that of the mother is not a punishable offense, and modern criminal law practice agrees in this respect. In theory, however, jurisprudence has reached no conclusion as to whether this destruction of fetal life should be allowed or condemned, nor as to how this destruction should be legally construed." Several German writers state that a physician who destroys a living fetus may be in danger from an unfriendly court. In this country a court will always justify a destructive operation on the part of a physician, provided he can clearly establish the fact that it was necessary in order to save the life of the mother.

The legal rights and liabilities of physicians in this country, therefore, are quite clearly defined. To decide the moral aspect of this question is much more difficult. The moral responsibilities of the physician for the unborn child are greater than his legal obligations. The views of the laity on the moral aspect of feticide are undoubtedly too lax. The absurd and trivial facts which are frequently urged upon physicians as reasons for destroying the products of conception should be treated with the contempt they deserve, and the parents should be clearly impressed with the fact that they propose a crime which legally and morally is little short of murder. To assume the right of life or death over a living human being, whether *in* or *ex utero*, involves a grave moral responsibility and one which cannot be lightly assumed by either parent or physician. Where the death of the mother is imminent unless the fetus is destroyed, the physician would seem to be morally justified in any act carried out for the purpose of preserving the more valuable life of the two.

A DEFENSE OF QUACKERY.

We have sometimes wondered how the publishers of reputable publications soothed their consciences for devoting so much of their space to aiding the venders of patent nostrums in defrauding and deceiving the sick and suffering. The following editorial, quoted *verbatim* from a well-known magazine published in the interests of the newspapers, sets forth the position taken by these papers and the light in which they view the public and the medical profession. The opinions expressed by the writer of this article need no comment. They stand themselves as the greatest testimony to his spirit of commercialism and to his utter ignorance of medical ethics and medical history:

"The Medical Society of Pennsylvania has assembled like a parcel of wise owls and resolved that newspapers should not advertise patent medicines. In their wisdom they did not suggest any substitute for the financial returns which newspapers would throw away if they rejected such advertising. As a matter of fact, there is a very good reason why the old line medical practitioners taboo advertising. They make it a part of their code of ethics that members of their profession

should not advertise. This is because they are fearful of the progress of the world; they realize that science is a progressive quantity and that young and brilliant men are constantly coming to the front with new discoveries, new ideas and advanced thoughts. They want to hold the world down to their old fogey ideas of non-progression, lest they should have their own business proscribed by abler men. It is that spirit which causes the crusade of the medical fraternity against advertising. There are many so-called patent medicines containing greater curative properties for the human race than any prescription which can be produced by the slow, old fogey practitioner. He hopes to keep his business in existence by building a Chinese wall which will prevent more progressive men from breaking in on his practice. He does not hesitate to get his name in his local papers as the attending physician of some prominent man. There really should be a law in connection with vital statistics requiring the publication of the name of the attending physician who succeeds in carrying his patients serenely to the grave. Perhaps that kind of advertising is what they would not appreciate, but it would give them an object lesson in showing the effectiveness of advertising by the falling off of their own business. Many of these old fogey physicians are glad to use the ingredients of the patent medicine when they can secure the formula and administer it surreptitiously. There are even occasional cases, as the writer knows from personal knowledge, where the old school physician prescribes the despised patent medicine because he does not know what to do for his patient, and he wants to filch from his victim on the pretense that he can cure him while he uses the wisdom of some one else to accomplish that object."

"In advertising medicines the newspapers confer a boon on the human race. The most scientific and careful research of the world often results in the development and discovery of a remedy which prolongs life and restores health. These discoveries would not have been made if left to the class of Pennsylvania physicians who are so afraid of advertising. They illustrate the dog in the manger style of doing business, and while great credit is due to the skill and research of the old-time practitioner, he is especially obnoxious when he assumes that medical wisdom begins and ends with him. If there were no patent medicines supplied or advertised, and the whole

world was left entirely to the old-line practitioners, there would be a boom in the undertaking business and the population of cemeteries would rapidly increase."

"It is better to relegate the Pennsylvania Medical Society to oblivion and recognize the "progress of the world" as shown by the advertising columns of representative and reputable newspapers."

A CORRECTION.

OWING to an oversight we failed to give credit to Dr. Isaac W. Heysinger for the memorial on the death of Dr. Carl V. Vischer, published in our July issue.

THE PRACTICAL SIGNIFICANCE OF A TRACE OF ALBUMIN IN THE URINE.—Joseph P. Ferris discusses this subject, and also after having the opinion of a large number of prominent physicians, concludes as follows:

1. From any point of view the term "physiological albuminuria" is almost universally regarded as misleading, unsatisfactory and inadequate.

2. As long as albumin is a constituent of the urine, the individual voiding it cannot be regarded as normal.

3. The mortality among such persons must necessarily be higher than among an equal number of individuals who do not show this phenomenon.

4. The actual mortality rate among this class can best be approximated by a comparison of the records of half a dozen of the largest life insurance companies (dealing with hundreds of thousands of cases) over a period of twenty years at least.

5. The prompt means of discriminating between transient forms of albuminuria and those of real clinical significance may be found in some such therapeutic test as that of calcium lactate, rather than by any further developments in the chemistry of the urine.

6. Experience proves that "a faint trace of albumin" in the urine of an individual past middle life is often of greater significance than "a decided trace" by unexpectedly directing attention to the finding of casts of pathological importance, which might otherwise have been easily overlooked.

7. For practical purposes the heat and nitric acid test for albumin is the best one, and the careful use of Robert's solution the most satisfactory control test in doubtful cases.

8. For the proper diagnosis and prognosis too much stress cannot be laid on a thorough consideration of the clinical conditions as a whole.—*The American Journal of the Medical Sciences*, July, 1906.

G. MORRIS GOLDEN, M. D.

GLEANINGS

GENERAL CONSIDERATIONS ON THE THERAPEUTIC USES OF DIET.—Hutchinson, in *The Practitioner* for April, 1906, states in regard to the therapeutic use which may be made of qualitative alterations in the diet, that it is well to have clearly before our minds the directions in which such treatment is likely to be of service. It may be safely asserted that no change should be made in a patient's customary diet, unless we have definite grounds for doing so. He further states the diet may require modification either chemically, or what is even of greater importance, mechanically, in order to meet some disability on the part of the organs concerned with the digestion and absorption of the food. From the organs of absorption the food reaches the blood, and may be made effective in determining chemical alterations in the composition of that all important fluid. Passing from the blood, the food reaches the tissues and places its impress on the whole character of the patient's metabolism, and it is here that the quantitative changes in diet play their chief part, but we may also seek to modify the direction of metabolism or to remedy the impairment of it, by suitable qualitative alterations in the composition of the food. Finally, having passed through the metabolic mill, what is left of the food reaches the organs of excretion, the amount of work thrown upon which can be largely controlled by altering the composition of the food.

In conclusion, he lays down some general rules which should always be borne in mind when drawing up any plan of dietetic treatment:

1. When prescribing a diet for a case of local disease, one must take care not to sacrifice the whole to the part. The organs are "members one of another," and one must not interfere with a patient's general nutrition in the interests of any one of them. This rule finds its chief application in cases of dyspepsia. It is often better even in the interest of his stomach—for a dyspeptic to endure a certain amount of discomfort after food, rather than to lower his general vitality by too great abstemiousness.

2. No article of food should be forbidden unless one has a good reason for doing so. Observance of this caution will insure the avoidance of arbitrariness in dietetic prescriptions, and greater consistency in the practice of different physicians.

3. In acute diseases one should recommend; in chronic diseases forbid.

4. Before recommending any article, find out whether the patient likes it, and whether it agrees with him.

5. If any article disagrees, it is generally better to reduce its amount in the diet than to cut it off altogether.

6. General and proposed changes of diet should be made gradually.

7. Always bear in mind the following aphorisms of three great physicians:

"Such food as is most grateful, though not so wholesome, is to be preferred to that which is better, though distasteful."—(Hippocrates.)

"More importance is to be attached to the desires and feelings of the patient than to doubtful and fallacious rules of medical art."—(Sydenham.)

"Physicians appear to be too strict and particular in their rules of diet and regimen; too anxious attention to those rules hath often hurt those who were well, and added unnecessarily to the distress of the sick."—(Herbeden.)

G. MORRIS GOLDEN, M. D.

ACUTE YELLOW ATROPHY OF LIVER.—Keates, in *Lancet*, of June 9, 1906, reports a case occurring in a man aged 18, who was thought to be suffering from a severe case of catarrhal jaundice. When the patient became delirious and vomiting and bleeding from the gums occurred it was evident that a simple jaundice could not account for all these symptoms. When it was found that the liver dulness, which had previously been normal, was greatly diminished and that leucin crystals appeared in the urine, there was little doubt of the diagnosis. Tyrosin crystals were not seen in the urine until the day before the man's death.

Previous to his illness the man was perfectly healthy, no signs of syphilis, and had probably never touched alcohol. There was no enlargement of the spleen and there was no great tendency to hemorrhage; the only one that occurred was from the gums. The jaundice was most intense, and both the tears and saliva were tinged with bile.

G. MORRIS GOLDEN, M. D.

INFLUENCE OF SALT SOLUTIONS ON THE BILE.—Casciani reports the results of some interesting experiments which he performed on a woman with a biliary fistula. He kept the patient on a strictly uniform diet, and gave her a mineral water containing about seven-tenths of one per cent. of sodium chloride. He examined the bile before and after the administration of this mineral water, and found that the amount of chlorine contained in the bile was slightly increased, while there was a more marked increase in the amount of biliary acids and of biliary salts eliminated. As cholestrin, the principal constituent of gallstones is kept in solution in the bile, by the salts of the biliary acids, the administration of saline mineral waters is one of the best preventatives against the deposit of gallstones in the biliary tract.—*New York Medical Journal*, July 14, 1906.

G. MORRIS GOLDEN, M. D.

X-RAY DOSAGE IN THERAPEUTICS.—Those observers and clinicians who have been engaged in this special line of work will indeed welcome a system of measurement based upon some unit which is standardized by mutual acceptance.

However, in this consideration, care must be exercised to the idiosyncrasy of the patient, although this may be overlooked to some extent or at least it is not thought to be of so vital importance as it once was.

Belot and Bordier, long the exponents of massive doses of X-rays, have had a great influence upon therapeutists as a class and the experience of many other observers has evidently been overlooked. We must recognize the fact that a great difference exists in the dosage that can be borne under

the graduated system of intermittent short exposures, which forestall the dangers of massive dosage. This is particularly so if the operator has no previous knowledge of his cases. This consideration is timely, because many new experimenters are entering the field, and for the beginner "moderation" is the caution.

From the experience of many it has been demonstrated that a great variation in the number of exposures has been necessary under similar conditions to obtain the same results. It must be borne in mind that no method of application offers the greatest safety where the massive dose is used.—*Editorial. The Journal of Advanced Therapeutics*, July, 1906.

WILLIAM F. BAKER, M. D.

ADJUSTMENT OF GLASSES.—The importance of the proper adjustment to the eyes and face of spectacles and eye-glasses is dwelt upon in books on this subject, and is conceded, in theory at least, by oculists and the best opticians, but as a matter of fact its practice is but too frequently honored in the breach than in the observance, even to-day.

How many oculists make a habit of testing the fit of the glasses furnished upon their prescriptions, especially as to the distance between the optical centers, and as to the proper tilting of reading glasses? Yet it is by carelessness on these points that the optician is apt to ruin the prescriber's reputation. Occasionally we find asthenopic symptoms due to improper centering of glasses, which, the patient assures us, have been accepted by the oculist as correctly made.

A patient once took a prescription by the writer to the wrong optician who—as was common with him—disregarded the written instructions and furnished glasses with too great distance between the optical centers. The patient further disregarded instructions and failed to report with the glasses. These gave so much discomfort that she went to another oculist, who gave identically the same prescription and sent her to the original optician, this time she went where she was sent, and the glasses were made and fitted as ordered. The result was that the patient was convinced that the writer did not know his business.

We have been taught that the plane of the correcting lens when in use should be as nearly as possible perpendicular to the line of vision. Looking obliquely through a spherical glass has an effect equivalent to the addition of a cylinder. In 1877, Dr. Edward Jackson called attention to this, and gave a table showing that the spherocylindrical equivalent of 1 diopher lens tilted 45° from perpendicular to the visual axis is 1.22 sph. = 1.24 cyl. At less degrees of obliquity the astigmatism is less, but it is not uncommon to see reading glasses fitted vertically upon the face, as if to be used only for extreme distance; the line of sight when reading through such a glass is at least 45° from the principal axis of the lens.

This malposition is fostered by the direction given the patient by the optician and should be discovered and corrected by the attending oculist.—*The Homœopath. Eye, Ear and Throat Jour.*

WILLIAM SPENCER, M. D.

AN ANALYSIS OF 145 CASES OF TYPHOID FEVER IN CHILDREN.—Alfred Hand and J. Claxton Gittings have prepared an analysis of 145 cases of typhoid fever from the records of the Children's Hospital, Philadelphia. They question the practical utility of such analyses, but come to the conclusion that most of these reports show more or less uniformity, and may be of special value to show the results of certain forms of treatment, when such are consistently carried out in a large number of cases. The points of interest may be summed up as follows:

The large percentage of infants affected, ten in all, a positive Widal reaction was present in each case.

Duration: Average, in uncomplicated cases, 21 days; with complications, 26 days. The shortest case ran 15 days.

Widal Reaction. Positive in 95%. This percentage should be higher, as in some of the negative cases a second examination could not be made.

Spots. Present in 70% of white children.

Enlarged spleen was present in 69%, but in some of the cases no record was made of this condition.

Abdominal tenderness or pain, 37%; *abdominal distention,* 20%.

Bronchitis was present in 26% of the cases; 6 cases developed *croupous pneumonia*.

As to the *leucocyte count*, they conclude that a normal count indicated typhoid fever, while a moderate leucocytosis did not exclude it. Nothing was said concerning the differential count.

Relapses occurred in seven patients, 4.8%.

Mortality. This reached 8%, two cases being uncomplicated ones.

Treatment. Baths were usually given when the temperature rose above 103°, the temperature of the bath being 85°, and the duration five minutes. Those who did not stand the baths well received sponge-baths, but it was observed that these did not exert the same antipyretic effects obtained by the tub-bath.

Stimulants. More than one-third of the cases received no stimulant whatever. When a stimulant was required, whisky was first used—5 min. for infants, 20 min. for children under four years, one-half drachm for older children, usually administered in conjunction with the bath. Strychnia sometimes became indicated.

As to *diet*, the writers say that they have become a little more liberal, not adhering so strictly to the pandry rule.—*Archives of Pediatrics*, June, 1906.

C. SIGMUND RAUE, M. D.

THE ACTION OF RADIUM UPON INOPERABLE CARCINOMA.—After referring briefly to the character of the rays proceeding from radium, Schucking (Pymont) says the action of radium will be applicable wherever we endeavor to get therapeutic effects from the Rontgen rays. Radium has the advantage of being applicable in places which can only with difficulty be reached with the Rontgen rays, and in addition it may be applied uninterruptedly during any desired length of time. In order to learn the effect of radium, the author applied 1 mg. of the pure radium bromide for two weeks upon the back of a rabbit. The effect upon the place longest affected by the radium was a distinct loss of substance over an area of several centi-

meters and penetrated all the layers of the skin. On other places subjected to the radium for a shorter period small pigmented nodules had formed, some of which were breaking down. After removing the radium the affected places soon filled with good granulations and after a few days had healed, leaving a scarcely perceptible scar. This result encouraged the author to try the action of radium in a case of inoperable cancer which partly filled the pelvis, affected all the vaginal tissues and was partly breaking down. For five weeks he applied a tube containing 3 mg. of radium bromide in the vagina, supported by gauze changed daily. The effect was as follows: The surface of the cancer was destroyed several centimeters in depth. At the edges the cancer was destroyed down to healthy tissue and healthy granulations appeared, and in nine days had formed a healthy scar. The ichorous disintegration of the cancer had ceased. On microscopic examination of the nodules which appeared on the rabbit's back, and also of the edges of the cancer tissue subjected to the action of the radium, there appeared changes in the capillaries and smaller vessels. The latter had either been destroyed or their endothelium had been loosened. The epithelial cells showed numerous proliferations at the margin of the destroyed tissue and the cancer cells showed many mitoses. According to this it would appear that the radium rays of moderate intensity stimulate cellular activity, and that their continued action is destructive, and the latter effect rapidly supervenes from larger quantities of radium. These effects would explain the curative action observed in the case.—*Zentralbl. f. Gyn.*, 1906, 273.

THEODORE J. GRAMM, M. D.

A CASE OF PUERPERAL TETANUS FOLLOWING ABORTION.—Seegert, of Olshausen's clinic reports a case which he says is worthy of mention because of its rarity. The patient had an abortion at the third month, which was completed by digital assistance. Fever was not present before or after. On the seventh day pains began in the muscles about the jaw and soon trismus set in and all the symptoms of tetanus. The patient died on the third day in spite of the use of Behring's serum. Bacteriological cultures made at the autopsy were all negative, but inoculations of mice with some portions of placental fragments removed on the first day of the illness gave positive results. The author remarks that this case proves again that tetanus may arise from a real puerperal infection at the placental site, and is almost always fatal. This was also shown by the tetanus epidemic in Prag in 1898. He also suggests that in view of the failure of other treatment, it is worth while to consider immediate total extirpation of the uterus along with the serum treatment.—*Zentralbl. f. Gyn.*, 1906, 393.

THEODORE J. GRAMM, M. D.

POST OPERATIVE TETANUS.—A case of this character occurred in Martin's clinic in Griefswald. The operation performed consisted in curettement, perineorrhaphy, anterior and posterior colporrhaphy, vaginifixure and loosening of perimetric adhesions. The patient had been prepared for operation in the usual manner, and no difficulties or complications were encountered. Five days after the operation the symptoms of tetanus set in and developed to a fatal issue. When the first symptoms of tetanus ap-

peared, secretion was taken from the vagina and uterus, and mice inoculated with it developed the typical symptoms. The cumol catgut used in this case showed negative to culture examination and some of the same gut had also been used in operating two other cases before the symptoms developed in this case. It would appear that the case admits of no other explanation than that the bacilli existed in the vagina and had not been rendered harmless by the careful preparation of the patient. Their existence there must surely be seldom. In order to determine this question secretion was taken from a large number of women just entering the hospital and before any bathing, and one hundred mice were inoculated with the same, with the result that in only three instances did the animals show septic infection, but never tetanus. The author refers to a number of published cases.—*Zentralbl. f. Gyn.*, 1906, 395.

THEODORE J. GRAMM, M. D.

A NEW AID IN EXTRACTION OF THE BREECH.—Wienskowitz makes a suggestion of interest. He points out that many authors are opposed to the use of the forceps upon the breech; that most of them advise to wait until the breech is born before interfering; that the blunt hook is a dangerous instrument and the linen band in the groin is difficult to apply and not easily sterilized. He says this prolonged waiting without giving any aid to a case of breech presentation may possibly be carried out in a clinic, but in private practice the circumstances are quite different, and especially when a consultant is called it is expected that some assistance shall be rendered. The author therefore suggests that by passing an inelastic rubber tube through the groin, a procedure easily accomplished, traction without injury may be made, and the case rapidly terminated.—*Zentralbl. f. Gyn.*, 1906, 379.

And then Bunge (Berlin) commenting upon this article says this method is not at all new, but that for twenty-five years he has used practically the same, only that he has passed a cord through a rubber tube and thus accomplished the inelastic feature of the instrument.—*Zentralbl. f. Gyn.*, 1906, 597.

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY JOHN HUTCHINSON, M. D.

A CASE OF PNEUMONIA COMPLICATED WITH ACUTE MENINGITIS.—R. F. Rabe, M. D., Weehawken, N. J., March 18, 1906, was called to see Alice R., age seven months. The mother stated that the infant had not seemed well for a week past and that she had been coughing for two or three days. Examination, with the infant naked, showed decided dullness of percussion over the left upper lobe of the lungs anteriorly and breathing bronchial in character. Had dry and evidently painful cough, as the infant would cry with each attack. There was well marked rigidity of the neck and with but slight pressure a decided *tache cérébrale* was easily produced by a stroke of the finger nail. The right foot was markedly flexed and the toes in a state of tonic contraction. The temperature per rectum was 103.4, pulse not counted. Vomiting was frequent and projectile in character. Diagnosis: Acute croupous pneumonia and meningitis. The skin was hot and dry; bowels had not moved; infant seemed best when undisturbed and in a cool place and when held firmly in the mother's arms; greedy thirst.

Byronia c. m., Skinner potency, in water, three doses at intervals of one hour was given.

This was at 8 o'clock at night.

March 19th, 9 a. m.; temperature 102.2, and infant comfortable.

Sac. lac. in water every three hours.

March 20th, 10 a. m., temperature 99, and infant decidedly better; cough less frequent and softer; neck no longer rigid and vomiting had ceased entirely.

Sac. lac.

March 21st. Continued improvement, infant drinking five to six ounces of milk eagerly.

Sac. lac.

March 22. Infant continues to improve; will not stay covered; kicks off covers constantly; thirsty; urine seems to scald; vulva red and slightly inflamed.

Sulphur c. m., Skinner potency, in water, three doses only, at intervals of two hours.

This finished the case and the infant has been perfectly well since. The contraction of the foot and toes disappeared after the third day. The case is submitted for the sake of showing what the single homœopathic remedy, particularly in the high potency, can do in apparently serious cases. I say

"apparently serious" because I admit that such cases may get well without any treatment at all. The percentage, however, is a small one. The pneumonia I believe to have preceded the meningeal inflammation in this case. Lastly, and this for the benefit of my diagnostic and pathological friends, to whom the label on a disease is of paramount importance and usually suggests the treatment, I respectfully submit that this case was treated on the totality of the symptoms solely, the little patient and not the subjugating disease being prescribed for. Homœopathy knows no other, if cures, not mere recoveries, are to be expected.—*The Critique*.

L. S. COLTER, M. D., says: An observation I desire to make in reference to the use of the obstetrical forceps is that from what I have seen, I am convinced that not one physician in ten knows how properly to make traction after the forceps have been applied.

I was always taught that unless great emergency demanded haste that plenty of time should be taken with this procedure; that if the woman is having periodical uterine contractions, to make traction with the pains and rest in the intervals; if she is not having contractions, to imitate nature in this respect and make traction for a short period and then rest, slightly relaxing the grip of the forceps on the child's head, and then to again make traction. The benefit of such a procedure is well known to all, and yet I find that this is just exactly what a great many physicians do not do. They seem to be possessed with the idea that the safety of both woman and child depends largely on the haste with which they can expedite the delivery, and they make continuous traction with all the force that they can command. I have frequently seen strong men, bathed in perspiration, tug and tug away at the forceps until they have actually become exhausted from their continued violent exertion, and when finally they have perchance succeeded in bringing the head down upon the pelvic floor and the perineum is stretched to the limit and its edges thinned out to the thickness of a sheet of paper, they seem to think a supreme effort is necessary on their part, and with a final desperate pull they literally jerk the head, not over its margin, but through its substance. . . .

A failure to bear in mind the direction of the axis of the pelvic canal in making traction I find to be another common error with many physicians. It is truly astonishing to see how many men in making a high forceps operation, will begin their traction and continue it, paying absolutely no attention to the position of the head or the "curve of Carus."

A short time ago I was called up by phone and asked to take my obstetrical forceps and repair to a certain part of the city and ascertain what was the matter with two physicians who had for about thirty-six hours been laboring industriously to deliver a young woman with forceps. They had finally given up and telephoned him to come and make a Cæsarean section, as the child could not otherwise be delivered. On reaching the patient's house I was informed by the physicians, two able-bodied men, that in the past twenty-four hours one of them had applied the forceps six times and the other one time, but that in spite of the fact that the last time they had kept up the traction for three hours and with all the strength they could command, they had not been able to budge it an inch. They had finally agreed that her pelvis must be contracted and that an abdominal section

was indicated. I told them that I did not make abdominal sections, but that I would like to try my luck with the forceps. They consented, but added that they felt sure that I would not succeed as they were both evidently stronger men than myself.

On examination I found the head at the brim and the woman's pelvis apparently of normal dimensions. The occiput of the child's head was to the left and anteriorly. With the woman in the lithotomy position and sitting before her on a chair, I applied my Elliott forceps, and with my right hand grasping the handles and the index finger of the left hand resting on the child's head to see that the blades did not slip, I began to make traction, using the strength only of my right hand and arm and making the traction in the direction of the axis of the pelvis. The head began immediately to enter the pelvis, and in less than ten minutes from the time I began to pull was down on the perineum, and delivery was easily completed, completed as easily, I think, as any I had ever made, and without any great expenditure of muscular force. Evidently, in making traction they had disregarded the direction of the axis at the brim and were attempting to dislodge the head by pulling it against the anterior border of the brim, and, of course, they failed to move it. . . . *Journal of Surg., Gyn. and Obst.*

OBSTETRIC REMEDIES AND METHODS.—(*Medical Visitor.*) Medication for nausea during pregnancy has not been satisfactory, is my experience. I was told of one successful case, relieved by phosphorus cc. My failures may be owing to ignorance of the *Materia Medica*. The following medication to the cervix uteri has proved beneficial for nausea: Extract of belladonna and extract of opium aa gr. xx, lanolin and cosmoline aa 3 ss, with this saturated tampons of sterilized wool (each should be six inches in length and two inches wide) and apply to the anterior and posterior surfaces of the cervix. This medication relaxes the circular fibres of the cervix and the nausea which is reflex, is generally relieved. Before applying, thoroughly cleanse the vagina with the following preparation: R Thymol 3 i, alcohol 3 vi. M. Sig: One dram to one quart of water.

If at the beginning of threatened abortions, try viburnum prunifolium.

I once gave pulsatilla cc. for a breech presentation and the child presented normally. I do not think the pulsatilla had much to do with the turning, for it is impossible to eliminate the natural tendency to restoration. However, the mother gave full credit to my skill, declaring that she felt it turn shortly after taking the remedy, and I did not disabuse her mind by offering any opposition to her conclusion.

During the last four months of pregnancy I give macrotin 2x t. i. d., to make labor easy. I cannot say positively that its use is of any real value, save sometimes it may prove a kind of "mental salve" to the patient. We know that its effects upon muscular tissue are such as to lead us to expect relaxation of the muscular fibres of the uterus, and an easy labor, or perhaps an easier labor, generally follows.

I believe in pre-natal medication in individualized cases. In general, study hereditary conditions; if rachitic tendencies are evident, give calcarea carb. cc., and persist with it; if bone growths are probable, as exostoses, Hecla lava; malformations, phosphorus; if luetic, mercurius.

If the os is rigid it will yield to gel. 2x, or the same local application for nausea, or, if these fail, try atropin 1-120 gr. hypodermatically. . . .

Veratrum viride (Norwood's) is the best remedy for lowering high temperature. It has saved many lives when given in 1, 2, or 3 m doses, hourly, if necessary. To the late Dr. Fordyce Barker the profession is indebted for this valuable suggestion. His book on Puerperal Diseases is very valuable and should be read by every physician.

For metritis, salpingitis, or ovaritis, the ice-bag on the abdomen has been a valuable adjuvant.

When the os is dilated to the size of a silver dollar, give secale carefully and cautiously. If the uterus is slow in returning to its normal size, try viscum album ix.

For mastitis, gently strap the breasts and give belladonna, 3x.

For nipples apply Friars' Balsam or lactate of lead ointment.

For leucorrhea following birth, give infusion of White Pond Lily—a dram to a pint.

For cystitis, benzoic acid, 2x.

For eclampsia, veratrum viride, Norwood's tincture, 5 or even 10 m per dose frequently, and chloral hydrate suppository, grs. 5 to 10 every two or three hours. May give, if necessary, 30 to 100 grains in twenty-four hours—or morphine—or, under certain extreme conditions, phlegotomy.

When feet and ankles swell, and the vulva is edematous, during pregnancy, examine the urine, and if the volume is lessened or the urea abnormal give apis 2x, arsenicum 3x, or acetate of potash grs. 10 t. i. d., and restrict the diet to skimmed milk.

For placenta previa centralis I would carefully consider Cæsarean section. There are also conditions of eclampsia, embryotomy, hydrocephalus, when Cæsarean section will be justified, for the safety of both mother and child.

Cæsarean section is preferable to symphyseotomy; the latter generally leaves the patient an invalid, the pubic bones failing to unite resulting in injury to the sacro-iliac joints. Eminent and conservative gynecologists have relegated it to the past.

The "Walcher position" has made difficult labors rapid, and in some cases where I have been called to perform Cæsarean section or symphyseotomy the "Walcher position" has been all-sufficient.

I firmly believe that Cæsarean section will be performed in many cases that heretofore have adopted methods that have resulted fatally to both mother and child, or left the mother a permanent invalid with the death of the babe.—H. F. Biggar, M. D., *American Physician*.

WHAT MEN WANT OF THE DOCTOR.—A little story which was once told by a professor at Dartmouth Medical College to while away an otherwise dull hour, well illustrates the object for which men usually employ a physician.

A young man who had been suffering for a long time from some obscure disease, was growing steadily worse, and the attending physician gave little hope of his recovery. Finally, as a last resort, and at the request of the father, a consultation was held, and six of the ablest physicians in the vicinity were summoned to the case, and asked to determine what could be

done for the patient. The doctors met, and each man made a thorough study of the patient and his symptoms, after which they retired to a private room for consultation. Meanwhile, the anxious father, who was determined to know the verdict of the consultants at first hand, and not as it might perchance be "cooked" in the interests of the attending physician, had secreted himself in a closet in the room where the doctors were to meet, and listened intently to the discussion as it took place.

One by one, beginning with the oldest and coming down to the youngest, as by the code of ethics is duly provided, these wise and scientific men delivered themselves each of his own opinion as to the diagnosis and pathology of the case, and offered his explanation of the obscure and unusual symptoms from which the patient was suffering.

Finally the older men had spoken, and it came to the turn of the youngest and last. "Gentlemen," he began, "We have spent all our time thus far in discussing the nature of this case. The thing which interests me most is, What will cure the patient?"

And in the closet, the listening father in his heart applauded, and quickly registered the vow, "This is the doctor that shall treat my son."

Men seek a physician to be cured of their diseases or relieved of their suffering; and he is a poor doctor, from their standpoint at least who cannot grant them the one boon or the other. To the physician the diagnosis is important, and the pathology essential; but for the poor victim, the cure is everything. To the men who employ us, and who pay the bills, we are simply doctors, not scientific men; "curers and not preventers of disease." From their point of view, the doctor who, when called to attend a sick man, tells him at the outset that his disease is self-limited and must run its course, that it cannot be avoided, cut short, or modified in any way by medical means, is not worthy of the name of physician, and has no excuse for pretending to treat the sick.

And when we come to think about it, isn't their point of view a sensible one?—N. E. *Alkaloidist*.

VESICARIA AND FRAXINUS AMERICANUS.—(*The Am. Med. Jour.*) Concerning vesicaria and fraxinus, Dr. George R. Shafer writes us as follows: Since writing my article for the National Association session at Minnetonka, Minn., I have been using the remedy continually and have confirmed what I said at that time. However, I use it in larger doses, say thirty to sixty minims at a dose. It never disappoints me in its action where the indications there given are present. I am satisfied that the article on the market best known is not a true representation of the "German bladder weed." I consider the preparation a compound, as I am positive there is some corn silk in it. Nevertheless, corn silk or no corn silk, it is a valuable remedy and I do not see how I could get along without it.

Fraxinus Americanus specific medicine, or any good homœopathic preparation, is invaluable to any physician who is doing a general practice, and to one doing gynæcological work it is indispensable. Taking those cases of subinvolution which we so often meet, there is no remedy known to me that will meet the conditions so readily as fraxinus. The indications I would give for the remedy are as follows: Heavy dragging sensation in lower part of abdomen, feeling as if the womb would fall out, pain extend-

ing down the thighs, pain in top of head. More frequently there is but a hot sensation about the size of a silver half dollar on crown of head; by placing hand on head there is a noticeable hardness or stiffness of the hair over the spot, with some warmth to the touch. Where I find the above symptoms I know *fraxinus* will relieve. When the following conditions are present it is of service: Large, heavy womb, which is soft or doughy to the touch, and any slight touch causes sharp pain. It must be given in at least thirty-minim doses every three to four hours. I have found in those cases of enlarged womb where there is a marked hardness it does not act so well.—*Chicago Medical Times*.

[It may be remembered by our school that the late J. Compton Burnett, of London, emphasized the value of *fraxinus americanus* on the above indications, which were brought out in the proving.]

EYE-STRAIN.—(B. G. Clark in *Hom. E. E. and T. Journ.*) The following indications may lead us to the study of the curative remedy:

Aconite—From exposure to cold or cold wind.

Arnica—From injury.

Argentum nitricum—Sewing and reading.

Cactus—Comes on periodically.

Carbo vegetabilis—From slight strain or sickness, < by looking upward. If associated with albuminuria.

Causticum—From dry cold; paralysis of recti muscles.

Chamomilla—If caused by anger (*Coloc.*).

China—From long illness.

Chelidonium—With hepatitis or scotoma.

Conium—With ptosis. (See *caust.*, *nat. a.*, *nat. c.*, *naja.*)

Crocus—From weeping.

Cuprum—Associated with nausea.

Gelsemium—If caused by fright; with double vision.

Hamamelis—Chronic effects of injury (*conium*).

Hydrastis—With catarrhal troubles of nose and throat.

Kali iodatum—From syphilis.

Macrotinum—Before menses, > after them.

Natrum muriaticum—With spinal irritation.

Nux vomica—From alcohol or tobacco.

Paris—With jerking pains; eyes feel drawn back by a thread.

Physostigma—Internal recti.

Rhus toxicodendron—From exposure to wet.

Ruta—From overuse at fine work.

Santonin—Associated with cystitis. Colored vision, objects look green, white looks yellow.

Secale—Double vision in weak subjects.

Senega—Double vision vertically; pupils dilated.

Spigelia—Associated with post-nasal catarrh. Severe pressing pains in eyes.

Stillinga—From syphilis. Muscular soreness and pains, < by near work.

Tabacum—Internal recti. < by looking at anything white.

Tilia—With facial neuralgia or rheumatism, < while sweating.

POISONING BY RHUS TOXICODENDRON AND RHUS RADICANS.—E. S. McKee, M. D., Cincinnati, in *Pacific Med. Journal*. I always feel that I know a little more about a disease having had it. Having had it twice, I feel that I should be allowed to speak somewhat *ex cathedra*. I well remember when the coal-tar products came first into general use, I was taking a dose to be frequently repeated for a temperature of 104°. The fever soon vanished and the powders became very depressent. I felt that another powder, if taken as directed, would finish me. I stopped them and rallied. I can feel that sensation yet. It fixed in my mind more plainly the use and abuse of the coal-tar products than any amount of reading or lecturing. This experience has doubtless saved me some patients since then.

Rhus toxicodendron is known as poison-ivy or poison-oak. Poison-ivy has but three leaflets. Virginia creeper and American ivy, with which it is frequently confused, have five. There are about fifty varieties of poisonous plants in America, but there is no general rule by which all may be recognized. The characteristics which generally, though not always, accompany poisonous plants are the peculiar lurid purple color seen on the stems of the castor-oil, conium, cicuta, pokeberry and dogbane. A narcotic odor is common to many but not all. An acrid taste is probably the most common and best safeguard we possess. Milky-juiced plants may be regarded with suspicion. Rhus toxicodendron has very wisely been dropped from the new U. S. Pharmacopeia. Rhus radicans has been termed the poison-ivy and rhus diversiloba the poison-oak. There is considerable difference of opinion among botanists as to whether Linne's rhus toxicodendron is identical with his rhus radicans. . . .

The nervous symptoms formed a very distressing part of the disease. For a couple of weeks seeing one patient would put me to bed exhausted. Making out a bill would have the same effect. I would go to sleep from sheer exhaustion on a street car. I could hardly write my name or think. I found great relief in tumbling into bed after every effort and became very expert at it. Bromide of sodium 2.00, three to six times a day, quieted my nervous symptoms. Two drops of Fowler's solution were added to each dose to prevent acne bromata. This condition gradually disappeared and when natural sleep returned my nerves soon regained their normal state.

The greater part of my skin exfoliated, and the new skin, especially on the ears, was for some weeks very tender and sensitive, itching on the slightest provocation, though nothing was visible to cause the itching. Flannel or wool next the skin was excessively irritating. I found it necessary to anoint the newly-forming epidermis frequently with olive oil or mixtures containing adeps lanum to aid in its growth and to protect it from irritation.

Legal measures for the prevention of this trouble by the eradication of the plants should be taken, especially in thickly settled communities. Immune persons, of whom there are many, should be employed to complete this destruction. This can be done mechanically by uprooting, or better, by the application of a sulphuric acid, 2 c.c., to the stems every two weeks till the plants are killed. The brush should not be left on the ground nor the wood used as fuel, for the poison is found in the wood long after dead and even in the smoke. Indeed there are persons who cannot pass to the windward of these bushes without suffering from their venom. Others

can handle them with impunity and even inject the poison under the skin without suffering any inconvenience. It is possible, though not probable, to transfer the poison by the clothes or towels of persons affected or handling the plants. Immunes when handling the plants should wash with alcohol to avoid carrying it to others.

I claimed and obtained accident insurance. Surely I did not run into that bush on purpose.

FOREIGN LITERATURE.

CONDUCTED BY E. FORNIAS, M. D.

SEROTHERAPY IN HOMOEOPATHY.—In a discussion over the microbial toxins and their use in homœopathy, Dr. Balari, of Barcelona, Spain, reminded us that Hahnemann had already suggested the possibility of treating diseases by the production of others, with which they should maintain symptomatic and phenomenological similitude, but that our master had also clearly pointed out the many dangers, which in such cases would confront the patient, if, by the inadequacy of the selected disease to cure the existing one, instead of a cure we should only obtain an aggravation of the trouble, aggravation before which we would necessarily remain powerless.

He thinks, the microbial toxins like other poisons, may lend us very valuable services, if only, after considering their characteristic symptoms, and subjecting them to a due physiological experimentation, we apply them according to the great law of similitude. Dr. Olivé y Gros considers very important that in the experimental study made of the microbial toxins, we should endeavor to obtain them, in the highest degree of purity possible, avoiding mixtures which in the future may render the new preparations of the remedy unreliable.

He is inclined to reject the use of psorium and sudosin and other medicines of similar origin, on account of the doubtful character of the preparation, which will undoubtedly interfere with the results expected. He says about the same of tuberculinum and pirogenium, and that, although he has obtained happy results from them, yet he considers them unreliable, for neither their preparation nor their source, rest in fixed bases.

He spoke of the serous products, and said we should bear in mind that to obtain good results they must be used at the beginning of the infection, when they can better oppose the primary action of the microbes, and not when the consecutive secondary alterations and organic lesions due to them and their toxins, are not so easily under the beneficial action of the anti-toxins.

He calls our attention to the fact that the antidiphtheritic serum produces permanent relief in those suffering from kidney trouble, and that perhaps well studied may give us admirable results. He has also found the above mentioned effects similar to those obtained by the second decimal trituration of Klebs and Löffler bacillus. The trituration of this bacillus according to this doctor, produces fixed effects; and the same result is obtained from the serum of the same bacillus, but it hardly produces any aggravation when given in judicious doses.

The serums of immune animals act not only by the antitoxins, but also by

histolysis and bacteriolysis, as it has been recently demonstrated. This makes them very interesting, and probably when better studied may control microbial therapeutics, for they have a more extensive action and are then exempt from danger.

The anti cancerous serum of Richet and Haricourt, produces great relief, and some have even spoken of cure, but Courtmont prefers the serum of the normal ass to that of the immune one, claiming that the normal allays the pains and is free from danger.

DR. E. FORNIAS.

MEASLES AND THEIR COMPLICATIONS.—In the last severe epidemic of measles in Spain, the disease prevailed with such malignancy that not only children, but robust adults, and even the aged were attacked, Dr. Pinart, of Barcelona, in a paper published in the *Revista Homeopatica*, states that those who consider this affection a benign exanthematic fever, are very much mistaken. He calls to mind its great contagiousness, superior to that of scarlatina, and its prowess to lead to serious complications, the chief of which being pneumonia, bronchitis, phthisis and otitis media. He lays a great deal of stress on the necessity of combating the common error of the classes, not to consult the physician until the disease has developed some of its grave features or complications. The patient, although well protected from exposure, should not be covered too much, as in olden times, much less should there be allowed much heat in the room, and never kettles of boiling water with aromatic substances, to increase the heat and make the patient sweat. I have seen such strenuous and forced means followed by a rapid debility, which necessarily must interfere with the development of the eruption; and what is worse, by cerebral, meningeal or pulmonary congestions, which only *veratrum viride* was able to amend. During the premonitory stage, and as a preventive he recommends *pulsatilla*, 3, every 3 hours. During the second period, or the onset of the disease, if the fever mounts high (40°) he gives *veratrum vir.* 1, six doses repeated every half hour. Should epistaxis occur, *hamamelis*, 1; if convulsions, especially during dentition, *zincum met.* 30, every quarter of an hour, but if not complicated with dentition, *kali bromatum*, 200, in the same manner as *zincum*. If during the appearance of the eruption, diarrhœa supervenes and any bronchial rattling is heard, continue with *pulsatilla*, if no other medication is necessary. During the period of desquamation, especially if the face presents a furfuraceous aspect, he uses *apis*, 6, and *arsenicum*, 30, not only to stimulate the mucous membranes, but to aid urinary secretion.

This, however, is not always the course the disease takes, there are abnormal forms which shall be considered hereafter. If the evolution is normal, the above will prove sufficient. If during the initial period diarrhœa supervenes, as stated above, *pulsatilla* given for the early catarrhal symptoms will also cover this admirably. For laryngeal localization, with dry cough, he recommends *belladonna*, 6, alternated with *pulsatilla*, and if not sufficient with hydrocyanic acid, 30. For extreme conjunctivitis, he advises local applications of hot water, with a few drops of *euphrasia*. If the coryza persists or becomes worse, after *pulsatilla* we may find the remedy in *allium cepa*. 6.

In the inflammatory form, when the fever is very high, we should commence the treatment with aconite, 6, alternated with belladonna, 6, but after 24 hours, we insist on the employment of pulsatilla, 3, and as an intercurrent, veratrum viride, 1, as stated above. In the pulmonary or suffocating form, the danger consists in the impending asphyxia or syncope. The author claims that by giving bryonia and ipecac alternately, we not only combat the manifestations of the disease in the bronchial mucosa, but that we drive them with greater force to the cutaneous surfaces. If the dyspnœa persists, with cardiac manifestations, we should give digitalis (mother tincture), but when the disturbance is of nervous origin, the remedies are moschus, 30, or ledum, 6. For threatening syncope, he gives veratrum alb. 6. The hemorrhagic form is rare and grave, and in phosphorus 12, we have the principal remedy, followed by hamamelis, 1, if insufficient.

The ataxo-adyamic form, consist of a syndrome, embracing the whole infective state, with high fever, prostration, and marked nervous phenomena, and here baptisia 1, alternated with rhus tox 6, are indicated. Later on, arsenicum, 6, and nux vomica, 6, may be required.

As to complication, I shall mention only the pulmonary and laryngeal. We observe frequently pulmonary congestions, which are readily removed by phosphorus, 30. The broncho-pneumonias, which are to be feared most, have been treated by us, with bacillinum, 100, two pellets every morning, followed by bryonia, 6, and phosphorus, 12, alternately. The laryngeal complications are very important especially pseudo-membranous laryngitis, in some cases, of diphtheritic character, and which necessarily demand the employment of remedies covering the condition. If not specific, with remedies like chlorum, spongia, hepar, bromium, kali bichromicum, causticum, &c., according to indications we can control the croupal phenomena.

When convalescence is delayed with loss of appetite, and slight nocturnal fever and sweats, the lungs should be thoroughly examined, to discover the existence of tuberculous foci, for there is no doubt, that these dormant centres of infection, favor the development of measles, which in time stirs up, and multiplies pathogenic germs, which otherwise would have remained latent and inactive, during the normal course of life.—Dr. Pinart, *Revista Homeopatica de Barcelona*.

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CLINICAL METHODS OF EXAMINATION.

EXAMINATION OF THE HEART.

BY

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THE examination of the heart is often an exceedingly easy matter, but sometimes it is one of the most difficult problems in diagnosis to determine the exact state of the organ. A correct understanding of a diagnostic problem in the circulatory sphere may occasionally necessitate the examination of every organ in the body. Generally, an examination of the heart itself and of the vessels is sufficient for all practical purposes. Many cases however, require to have, in addition to the vessel investigation, an investigation of the lungs, the liver, the kidneys and the spleen. The necessity for a general examination can only be determined by the individual case.

There are quite a number of diagnosticians who absolutely ignore all history until after the physical examination is complete, and they take this course because they know that any subjective symptoms referred by the patient to the heart can only be interpreted by the results of physical findings, and that without these physical findings, in a large number of cases at least, the subjective symptoms are valueless, and, at best, speak only for a neurotic or functional heart disorder. In other instances the history may be of service as suggesting the possible

presence of a certain acute malady, or the history of such an affection, for instance, as articular rheumatism, may make more likely the presence of a chronic valvular lesion. Practically, much depends upon what our object is in the examination of the heart. This determines the methods of procedure. The establishment, for instance, of the presence or absence of organic disease of the heart is a different sort of a problem, practically and scientifically, from the determination of the heart's competency as a mechanical instrument for the propelling of blood and for carrying on a normal circulation. It is part of a doctor's duty, in treating a case of any moment whatever, to determine the status of the heart, whether that organ be the seat of disease or not, and it is the problem of competency that confronts most practical physicians, and is the one for which most physicians seek, ignoring meanwhile some of the finer diagnostic details that would be of great moment to a specialist making a diagnosis for the sake of scientific accuracy.

It is then, perhaps, the routine examination of the heart that really requires the most skill, and we very frequently examine hearts without any reference particularly to the malady we are to treat in the patient, but in order to ascertain the state of the heart at the moment, and to judge as to how it will be likely to act in the progress of the particular disease present; and hence, if we are taking the history in the ordinary way, no indication whatever may point to the heart as the organ which may be responsible for certain of the symptoms complained of; and, when the heart is examined and certain phenomena and physical signs ascertained, such findings may alter our whole conception of the case, prognostically and therapeutically. Right here I want to say that a mere perfunctory examination of the heart is, except in cases where the patient is already dying, almost worse than none at all, and frequent repetitions of such thoughtless investigations make the examiner less and less competent to draw any conclusion of value from his findings by means of physical signs, for, after all is said, it is simply absolutely impossible to make a diagnosis of a heart malady of any description from subjective symptoms alone. The heart itself must tell its own story; it alone is the interpreter of the gravity and value of subjective symptoms.

The cardinal symptoms of heart disease, namely, shortness of breath, dropsy, cyanosis and pulse alterations, may all be

absent, and yet physical examination betray gross and irremediable heart disease; and yet all these symptoms may be present and the examination show that they are not dependent upon disease of the heart at all, but upon some other organ. While this proposition is true, it must be noted that most bizarre and unusual symptoms and conditions may find a rational explanation only in the condition of the heart and circulation.

The greatest problem to a practical physician is to determine the amount of work a heart is capable of doing, and how much stress it can stand, in either acute or chronic disease; and, while it is relatively true that such a diagnosis of the heart's working capabilities is only possible, in great nicety, by one who is able to readily recognize all the organic diseases of the heart, it is not true that the general practitioner, in the majority of instances, cannot form a good working idea of the power of the central organ of circulation without the knowledge and technical skill of the expert in cardiac diagnosis.

Inasmuch as the expert is supposed to know all about the technique of heart examinations, and of the points to be elicited, and of the value of the negative and positive factors available for purposes of diagnosis, I am less concerned, in the presentation of this paper, about what the specialist will think, than I am to present certain data that may be useful to the general practitioner in the examination of the heart, with the distinct understanding, however, that the examination of a heart case of any gravity whatever more frequently than otherwise demands an equally skillful investigation of other organs and other functions than those of the circulation.

Practically, one can begin an examination directly, without any preliminaries as to anamnesis, or one can take a full history of the case. In the first instance, if certain phenomena are found in the course of the physical examination, direct and pertinent questions can be asked that may possibly explain or interpret what one finds; or, finding the heart normal physically, any cardiac symptoms that may be elicited will be estimated at their true value. If, on the other hand, we take the history of the case, and suspect the party to be examined to have some cardiac affection, we can inquire into the personal history as to rheumatism, tonsillitis, any of the exanthemata, typhoid, diphtheria, chorea, etc.; and as to arteriosclerosis, apoplexy, gout, syphilis, alcoholism, articular affections, angina

pectoris, dropsy, *ad lib.*; but, no matter how great the apparent likelihood of a given suspected lesion, it is after all the physical examination which alone tells the true story. And now for some of the methods.

Inspection.—Inspection should be both general and local; that is, directed to the aspect of the patient as a whole and then locally over the præcordial region. Look at the eyes, they may show the “cardiac facies”; at the temples, they may show tortuous vessels; at the cheeks, they may show undue pallor, cyanosis or enlarged capillaries; at the nose, whose *ale nasi* may betray distress for breath, or may show undue thickening, as is in some cardiopaths in childhood; at the ears, which may betray pallor, turgescence or cyanosis; and at the lips, above all, for they may betray embarrassment in the venous circulation.

View the vessels of the neck, which may show undue pulsation in fevers, in hypertrophy, in aortic regurgitation, in atheroma, in arterio-sclerosis, in anemia, in tumors of the mediastinum, and may even, by a unilateral quiescence of motion, suggest sinus disease or cerebral compression, and not be directly connected with the central organ of circulation at all.

The body generally should be viewed for oedema or dropsy, and the feet examined. A slight oedema of the ankles may mean much. The ends of the fingers may be “clubbed.” You can look for oedema of the face, which may occur as part of a general dropsy, due to heart disease; and, aside from local conditions and Bright’s, myxoedema and other oedemas, which such swelling may possibly be due to, may even suggest pressure on the ascending *venæ cava*. Look for oedema of one or both arms, or one or both legs, and meanwhile note the condition of the deep and superficial vessels as to tortuosity, visibility and movements. Note epigastric pulsation. Come then at last to the inspection of the bared chest. A heart is never thoroughly examined until the bared chest is inspected. When there are reasons why this direct inspection cannot be had, the chest may be examined in sections, or the præcordia examined alone; but that should be done always, if you would be thorough in your examination. When the chest is devoid of clothing, look for enlarged veins, for undue prominence of the præcordial region. The heart region is much more likely to show decided enlargement in children suffering from heart affections than in adults. Look for the “pear-shaped tumor,” of peri-car-

dial effusion, and don't be disappointed if you do not see it, for such a tumor is a rare finding, even when sub-acute and chronic pericardial effusions are great in amount. You will find this tumor sometimes by percussion, seldom by inspection. Note whether the apex beat recedes with the impulse of the heart. If it does, hypertrophy of the heart is suggested, as also more strongly, adhesive pericarditis. Note whether the chest retracts posteriorly over the heart position (Broadbent's sign). Retraction of the apex and of the upper portion of the epigastric region, and the posterior recession, are signs only discoverable by inspection, and not by any other physical means, and hence the importance of never omitting inspection, for these are the only positive signs we possess of adhesive pericarditis.

Note the position of the apex beat and the extent to which it is visible, and in doing this remember that the normal heart does not always make its systole visible in the fifth intercostal space an inch inside the nipple line (or three inches from the centre of the sternum, inasmuch as the nipple line may be an unreliable guide), for the normal position of the apex beat is a matter of age, being close to or outside the nipple line and up as far as the fourth interspace in most children up to the fifth year, and often down as far as the sixth interspace in the aged. If the patient is in the adolescent or adult period of life, the apex beat, other things being equal, should be in the fifth interspace, an inch inside the nipple line. "Other things being equal" is the rub, for the apex beat may not be visible at all, because the chest is too broad, because the apex strikes against a rib, because the chest is too well covered with adipose, because the heart is too weak; and it is displaced from the normal position by the most diverse conditions from within, from without, from above, from below, and from the side. In other words, a displaced apex beat should at once lead you to find out whether the apex beat is displaced by causes extrinsic to the heart itself. This point must be at once settled before you dare draw conclusions as to whether the apex beat is displaced by reason of changes in the size of the heart itself. Here you may have to examine the lungs for consolidation due to fibrosis, for fluid in the pleural cavity, for tumors in the chest; you may have to examine the liver to ascertain whether it is pushing the apex beat out of position and you may have to investigate every organ below the diaphragm in order to know whether any causes exist there to displace the apex beat. If

you have excluded all possible factors for displacement of the apex impulse, you can next note whether it is seen over a larger area than normal. Unless the chest is exceedingly thin, and the lungs are not retracted by disease or old adhesions, a large-areaed apex impulse speaks for increased exposure of the heart, and if all causes be excluded for such increased exposure save those due to the heart itself, such unusual visibility points to enlargement of the heart. There is vast importance in finding the apex beat in its normal position. While the conclusion is not absolute, such a finding almost rules out hypertrophy, dilatation and serious valvular disease; although it does not exclude the presence of acute endocarditis, the various myocarditides, or purely fatty degeneration. The normal position of the apex beat, too, speaks in favor of there not being fluid in the pericardial sac, although this observation does not apply to the dry form of pericarditis, nor where the major part of the fluid is posteriorly in the heart sac, nor in the earlier or later stage of pericardial effusion.

The fluoroscope, or the Roentgen ray method of examination, in the hands of experts, is occasionally of some service in noting the movements of the heart. The X-rays are also of service in differentiating solid tumors in the line of the aorta from aneurismal tumors; but they do not serve to differentiate an atheromatous dilatation from true saccular aneurism, as I have seen demonstrated post mortem. Here, where these two conditions are to be separated, the clinical is better than the X-ray diagnosis. The rays are also of service in the diagnosis of that unusual condition, aneurism of the heart. In the only diagnosis of the aneurism of the heart it has been my privilege to make ante-mortem the physical signs were amply sufficient. The fact that one cannot carry an X-ray outfit in one's waistcoat pocket, and that it takes some time before one becomes sufficiently skillful to rightly interpret the ray's findings, and one must meanwhile depend upon another, interpretation, makes it unnecessary to give this method of inspecting the heart more attention for the general practitioner.

Palpation.—By palpation we can sometimes find the apex beat when it is not discoverable by inspection. Finger-point pressure is of service here, as suggested, I think, by Reismann. We can also note the presence of pericardial and endocardial friction or thrills. Valvular lesions are not by any manner of means always palpable, but an endocardial thrill, when palpated.

is quite as diagnostic of a valve lesion as an ausculted murmur, and pericardial frictions, if rales and pleural friction can be excluded, are most valuable in the detection of either the first or last stage of pericarditis, and may even occasionally be appreciated at the base of the heart during the stage of effusion. The endocardial thrills may be presystolic, systolic or diastolic in time. We may note by palpation any abnormal or an extension of the normal impulses of the heart. Violence of movement speaks for functional palpitation, strength for hypertrophy, and relative weakness for dilatation. By this method also we can detect, in any tumor along the line of the aorta, the expansile pulsation of Corrigan, so valuable in the separation of aneurism of the aorta from other tumors. We can also determine the presence of diastolic shock, of value in the diagnosis of aneurism of the aorta and sometimes detectible in great hypertrophy and in some cases of adherent pericardium.

By vigorous rubbing of the skin of the thorax over the heart (or directing a spray of ether thereupon) we can elicit Abrams's heart and lung reflex, one of the most important methods of differentiating dilated heart from pericardial effusion. Stroke or spray the skin, after the heart has been carefully outlined by percussion, and the lungs will dilate and the outlines of cardiac dulness made out by percussion will be considerably diminished. If now we wait for four minutes, until the lungs have receded from the borders of the heart, we will be able to determine that the percussion outlines we made before have decreased; in other words, the heart has grown smaller to percussion, and this serves to differentiate the dilated heart, which can still contract, from the effusion in the pericardial sac, which cannot contract when the reflex is elicited and which betrays no change in the percussion outlines, as made before the reflex was induced by the irritation of the hand or ether spray.

By palpation, too, we interrogate the pulse, and appreciate the various modifications that are sometimes found as the result of valvular affections, as the "water-hammer" pulse of aortic regurgitation, the slowly beginning pulse of aortic stenosis, the small pulse of mitral stenosis and regurgitation. These pulse characters are not always marked in these affections, and are never pathognomonic, for there are vaso-motor and other reasons why these so-called pathognomonic pulses may be so closely simulated as to be undifferentiable from the "real

thing." Besides, it must be taken into consideration that in perfectly compensated valvular lesions these characteristic pulse alterations are only detectible by the expert and sometimes by the sphygmograph. In all the affections mentioned, as in all other conditions for that matter, the pulse furnishes corroborative evidence as to the state of the heart. He who expects to tell by it the real condition of the central organ of the circulation, the heart, except in cases of collapse or when a lethal end is impending, is leaning upon a broken reed in diagnosis. The radial pulse at best tells you only, and to a certain extent at that, the condition of functional activity of the left ventricle. The heart itself must be ausculted to tell its real state. The right ventricle tells its story of competency by means of the amount of muscular element perceptible in the first sound of the heart over the tricuspid area and by the accentuation or diminution in the intensity of the pulmonary second sound, as well as by subjective sensations of dyspnoea and perhaps obvious alterations in the respiratory rhythm, and often by the presence or absence of the evidences of venous engorgement of the large and small vessels, and often also of the greater viscera, as notably the liver, the stomach, and the kidneys. All the classically described pulse alterations, so important in interpreting heart and vaso-motor conditions, are detectible, as the slow pulse, the rapid pulse, the irregular pulse, the intermittent pulse, the dirotic pulse, the paradoxical pulse, the bigeminal and trigeminal varieties; but all these pulse characters require confirmation by direct auscultation of the systole of the heart. In this connection must not be forgotten the enormous value of the pulse rate diagnostically in several of the commoner diseases, when compared to the onset of the affection, to the rate of respiration and to the height of temperature. Such pulse observations, independent of the actual condition of the circulatory apparatus itself, are of inestimable diagnostic value in other than specific heart affections. The pulse of tuberculosis, the pulse of exophthalmic goitre, the pulse of alcoholism, the pulse of peritonitis, the pulse of sepsis, the pulse of opium poisoning, the pulse of cerebral compression, the pulse of apoplexy, the pulse of interstitial nephritis, are examples of the extreme value of pulse alterations in rate. The pulse rates at the various periods of life must occasionally be taken account of, as well as the tendency to intermittency in children, which fact needs to be emphasized, particularly in cases where cere-

bral symptoms are present, in order to avoid the error of considering such an irregularity as of necessity evidence of meningitis.

By pulse palpation we take in knowledge concerning tension, and thus obtain an idea of the condition of the vaso-motor apparatus, as well as of the possible weakness or strength of the left ventricle, and also of arterio-capillary resistance. Alterations of tension are not only of extreme moment diagnostically, but also of possibly greater importance as furnishing guides for proper therapeutic interference. Our fingers at once tell the story, when placed on the radial, as to the condition of the blood-tube, the artery, whether it is normal, arteriosclerotic, atheromatous, normally small, large, or whether the two pulses differ in the two radials, from vaso-motor disturbance, unilateral in character, from obstructions higher up in the vessel, from tumors in the axilla, from aneurism of the aorta, from growths in the mediastinum, or from a simple anatomical anomaly of distribution. No pulse has been half examined if the condition of the artery itself, and the condition of tension, is not at the same time noted as are other pulse characters. Taking the pulse tells you much, and it gives you information that can be obtained in no other way, but the pulse does not and cannot diagnose "heart disease." It gives you a fair idea of the function of the left ventricle, but its evidence is alone only suggestive, not positive. A pulse, for instance, relatively stronger than the sound of the heart, heard over the apex of the heart, may suggest and assist in the diagnosis of fluid in the pericardial sac. Remember that every systolic impulse does not always reach the radial. Pulse tension is of great assistance in the prescribing of proper drugs for the amelioration of heart conditions. A vaso-constricting drug is ordinarily contra-indicated in the high-tensioned artery and indicated in the low. By an examination of the pulse we can also tell whether our drug given, perhaps, to raise the arterial tension or lower it, is doing what we expect it to do. The radial tells us when we have given too little or too much of certain drugs, and is a reliable guide, taken in connection with certain subjective symptoms and other objective phenomena of the favorable or unfavorable progress of a case.

The use of instruments for measuring systolic and diastolic pressure in the arteries, as the hæmodynamometer, sphygmometer, tonometer, while still imperfect, give us in-

formation of more practical value than that furnished by the sphygmograph, and I think will ultimately supersede the latter in the hands of experts and in those conducting physiological experiments. The sphygmograph will show you finer arterial oscillations than those perceived by the finger, but does not give you as definite an idea of the condition of the arterial walls as does the finger. If one cares to make a graphic record of pulse characters for the purpose of permanent record or comparison, the sphygmograph will perform that service; but its readings are so notoriously different in the hands of different men making tracings of the same artery that it is questionable whether it will pay the general practitioner to become familiar with the technique of the instrument, considering the paucity of the information to be derived, from its use.

The tonometer, however, is not only valuable (and Stanton's modification of the Riva-Rocci is probably the best at the present state of development of instrumental blood-pressure measuring and determining pressure during systolic and diastolic periods), but also furnishes valuable information that can be of great service in determining the character of drugs to be given for a specific cardiac condition, associated with either high or low tension in the arteries. While the use of one of these instruments is not absolutely essential in cardiac diagnosis, it is nevertheless certain that in a fair number of cases (and they may happen to be very important cases) we cannot obtain a full diagnosis of the work of the cardiac apparatus without measuring the blood tension. We do this now by palpation with a reasonable degree of accuracy; but I feel sure that the future will develop a practical instrument in this line that will be invaluable. At present we assume when the vaso-constrictor drugs disagree with a cardiac patient, that his tension was too high; or, when a vaso-dilator has been given ineffectually, that the tension has been too low. In this crude way we may make out to test the blood pressure in certain cases where the pulse characters are not sufficiently marked to guide us correctly in the administration of drugs, and in doing this sort of "feeling our way" do we often lose very valuable time, which an accurate knowledge of blood pressure would save.

Percussion is of service in determining the size of the heart, the presence of fluids in the pericardial sac, the presence of tumors along the line of the aorta and of excluding diseases

in the lungs or adjacent organs that may displace the heart. Finger percussion, in the skillful, is all that is necessary for delimiting the borders of the heart and outlining the superficial and deep cardiac spaces. Adjuncts to finger percussion are the pleximeter of Sansom, and when this instrument is used more attention is really paid to vibrations than to sound modifications. Auscultatory percussion of the heart outlines has many advocates, and there are several methods, the best of which is probably by brushing with the finger or even a brush, while the structures are being auscultated with the rod of a phonendoscope or the small bell of a stethoscope. The heart size, as well as movements, as pointed out when speaking of inspection, can be detected by the X-ray. The usefulness and limitations of this method were then pointed out. Some authorities, in mentioning the outlining of the heart by ordinary finger percussion, speak of the great inaccuracy of the method, and show that the X-rays betray the fact that the finger percussion did not show the heart to have been correctly outlined, and that almost invariably finger percussion made the areas too small; the same charge has been made in regard to finger percussion as compared with auscultatory percussion. There is a great "tempest in a teapot" about this whole matter of percussion of the heart, and the practical physician will not bother himself to decide who is right or who is wrong, for a decision in favor of the X-ray or auscultatory percussion over ordinary finger work will not make the men who can percuss with their fingers abandon their method, and for the simple reason that the difference in results is so inconceivably small in some instances that "the game is not worth the candle." Let me illustrate: By auscultatory percussion I outline the heart and mark those outlines on the chest and then I outline the heart by finger percussion, and I find that the outlines do not quite agree. There are some minor differences, so minor that some of the outlines amount to three or four hair-breadths. Now, my object in percussing the heart is usually to determine whether the organ is enlarged, and whether it is five-eighths of an inch off in this direction and too short in that direction is a matter of profound indifference to me, for such variations are of doubtful value, and have nothing whatever to do with the diagnosis of the case, nor with the application of therapeutic measures for the relief of the patient who may be suffering from some

cardiac affection. A slightly greater enlargement of the heart would not make me change either my diagnosis or my drug.

It must be fully appreciated, however, that percussion of the heart borders and the ascertainment of the normal size of the heart or deviations from that normality are of infinite moment. We can seldom make an accurate diagnosis of hypertrophy, of dilatation, of valvular disease, without recourse to percussion, and we certainly cannot even guess the presence of small amounts of fluid in the pericardial sac without finding dulness in the cardio-hepatic angle and extending an inch and a half to two inches beyond the seen or palpable apex beat. Aneurism of the heart can sometimes be diagnosed by abnormal percussion outlines. The aneurism, when grossly enlarged, may often be discovered by percussion. In percussing the heart region we must not forget its normal position, and the deep and superficial cardiac spaces, and that in the very young the heart is more nearly transverse; in the old, very much lower than normal (bathcardia). The speediest way of outlining the superficial cardiac space is to commence percussing in the axilla, about the level of the fifth intercostal space, and working over toward the heart, until a change of tone becomes evident. On the right side one may commence two fingers' breadths from the right edge of the sternum and work toward the heart, remembering the presence of the liver, and in some instances depressing that organ by having the patient take a deep inspiration and then holding the breath until after percussion has been satisfactorily performed. Here, as well as in outlining the deep cardiac space, one may commence percussion at the first rib and work down until an alteration in the tone is noted, and one may then percuss inwards from the axillary line. It must always be remembered that in drawing conclusions as to the size of the heart from percussion the condition of the lungs must be known, for some diseases of the lungs (emphysema, etc.) may not only obliterate or completely change the outlines of the heart, but actually displace the organ; while still other pulmonary diseases may cause an increased exposure of the heart, and, more of that organ being permitted to come in contact with the chest walls than normally, a wrong inference may be drawn as to the size of the organ. Fluid in the pleural sac may displace the heart; tumors in the chest, liver or abdomen

may do the same thing, and even gaseous distention in the abdomen, as well as ascites, may drive the heart up to a higher level. It is often pushed down by aneurism of the aorta and by fluid, by tumor. The normal outlines of the heart can be altogether changed by a large effusion in the pericardial sac. I can only reiterate here that an examination of the heart may mean the investigation of the whole man. The mere examination of the heart outlines by percussion may in most instances be sufficient to establish the fact of its normal size or its enlargement, but mistakes are so often made by neglecting the lung examination that it is wise to call attention to at least a few of the possible sources of error in drawing conclusions about the heart's size as shown by percussion.

Auscultation is the most valuable of all the means at our command for the investigation of the heart as a vital organ (subject to the same ebb and flow of functional power as are other organs of the body, be it always remembered), and for the detection of the functional, neurotic and organic affections, as the myocarditides, the degenerations and the valvular diseases, as well as those affections attacking the endocardium and pericardium. By auscultation, too, we can diagnose aneurism of the aorta and of the heart. While auscultation is the chief means by which we interrogate the heart, the other methods are too often neglected, and some persons do not seem to have the proper conception of the heart as simply a part of the circulatory apparatus; they forget the centres in the brain, the vessels leading from and to it, the presence in the heart itself of certain ganglia peculiarly cardiac, and do not see that the lungs have anything whatever to do with heart action, when in point of fact they have much to do with the inflow and outflow of blood to that organ. Specifically, by auscultation, we can tell the presence or absence of the so-called heart murmurs. We can note the modifications that take place in the character of the first and second sounds of the heart, and the changes that occur in the time and rhythm of the intervals between the heart sounds; we can tell rate, rhythm, and increase or diminution in force; we can detect pericardial friction. Certain points are to be borne in mind. The heart sounds, instead of being as usually given as *two* in number, for purposes of diagnosis, are practically five and when we come to study them as a basis for determining whether the heart is normal or not. These normal differences in the

heart sounds are observable in the classical areas. In general, we say of the heart sounds that the systolic sound is best heard at the apex, the second at the base; that the first sound of the heart, as heard over the mitral area, is somewhat louder and lower pitched than the same sound observed over the tricuspid area. The differences in the second sound vary with age, and are especially important to remember because modifications in these sounds often become invaluable evidence in the diagnosis, not only of valvular lesions, but of atheroma, arteriosclerosis, and aneurism. Increase and diminution in these sounds, too, is often of vital significance as to the heart's capability during the progress of acute or chronic maladies. Up until the twentieth year the pulmonary second sound, as heard in the second left interspace, is louder than the aortic (Creighton), and about the middle period of life the aortic second sound becomes more intense than the pulmonic. Both these sounds may become accentuated beyond the normal by causes within the heart, as well as by causes outside the heart, as by over-exertion, excitement, by gaseous distention of the stomach, by effusions of liquid in the pleural cavities, by thoracic tumors near the heart, and by both consolidations and cavities in the lungs. The pulmonary second sound may become accentuated by hypertrophy of the right ventricle, by left-sided valvular defects, by pulmonary congestion, by palpitation, and this sound may be diminished in intensity by dilatation of the right heart, by tricuspid regurgitation, and sometimes by all the degenerations, apparently by upper-lobed emphysema, and notably in the acute myocarditides (although this is scarcely appreciable, owing to the diminution in the first sound), and a lessening of the intensity of this sound becomes one of our greatest aids in the discovery of oncoming or present "heart failure," in pneumonia or other pulmonary diseases. Here is where we auscultate the "pulse" of the right heart. Accentuation of the aortic second sound is noted especially in hypertrophy of the left ventricle, in increased arterial tension, in arteriosclerosis, in atheroma, in anæmia, in palpitation and in aortic aneurism, and diminution is found in left-sided valvular affections, in dilatation of the left heart, in "weak heart," in some cases of atheroma, in absolute fixation of the valves, which occasionally occurs in certain cases of atheroma of the heart and aorta. Without a consideration of the possible significance of alterations in these sounds, auscultation of the

heart is well-nigh worthless. A diminution in the amount of muscular element in the first sound, as heard over the mitral and tricuspid areas, is the important factor in the diagnosis of the myocardial affections, in fatty degeneration and in dilatation. This lessening of the muscular element may or may not be accompanied by a shortening of the first sound. Do not always expect to find a first sound lessened in muscularity, quality and shortened when dilatation is present. Here is a possible stumbling block. A relatively big sound and pronounced muscularity occurs particularly in dilated hearts that have previously been greatly hypertrophied.

Remember in diagnosing dilatation in these hearts that some of these secondarily dilated hearts have far more of the muscular element in the first sound than has a perfectly normal heart. In these cases where dilatation is suspected, and the muscular element is pronounced, the other signs must be taken into consideration, as well as the evidence of venous congestion in the lungs and throughout the system at large. An increase in the muscular element of the first sound is found only in certain cases of hypertrophy and in functional excitement. In the first stage of sthenic fevers increased intensity of the first sound is often noted. The relation of the first to the second sound, as regards intensity and pitch, are of great moment, but there is no way of telling exactly how this sound measuring is to be done. Only the avoidance of perfunctory heart examinations and experience will enable the inexpert to draw conclusions.

We note, too, by auscultation, the shortening of the interval between the second sound and the following systolic, in the rhythm known as "embryonic," in paroxysmal tachardia, in grave dilatations, and the "gallop rhythm," that most difficult problem in prognosis in heart affections, which is found exceptionally as a purely functional (?) disorder (simply because individuals have lived for years with this peculiar rhythm, is not necessarily evidence of its functional character, for cardiopaths often live just as long), in the dilatations of chronic interstitial nephritis, and in all the degenerations and myocarditides.

And now we come to a consideration of the commonest finding in auscultating the heart, namely, murmurs. A proper conception of what a murmur is is a prerequisite to the recognition of such sounds. A murmur is best explained by considering it an adventitious sound, an entirely new sound ele-

ment, preceding, accompanying, following or occurring with the heart sounds or heard in the intervals. A murmur is something new, something added to, the heart sounds or the intervals. Some murmurs are so intense that even a layman can hear them, and some are so faint that it requires some manœuvring during auscultation to develop them. The way to "not find" murmurs is to carelessly examine the heart, and expect to find something so big in the way of a new sound that it almost knocks your ear drum out of place. The way to find murmurs is to allow the ear to become thoroughly acquainted with the rhythm of the heart you are examining, and then to listen intently, and with a concentration mentally that shuts out all but the act of listening from your consciousness, and then watch for any addition or additions to the heart sounds or the pauses between them. When heart sounds and pauses are perfectly clear, have the patient stop breathing, and thus temporarily dispose of the masking effect of the respiratory murmur. If a murmur is recognized during suspended respiration, and is not of the kind known as cardio-respiratory, it can usually be heard when respiration is again permitted. After a murmur has been recognized, the next step is to place it where it belongs in the cardiac cycle. Is it presystolic (mitral stenosis, Flint's murmur, tricuspid stenosis)? Is it systolic? (possibly mitral regurgitation, relative insufficiency, Flint's mitral intraventricular non-regurgitant mitral murmur, tricuspid stenosis, pulmonary stenosis, aortic stenosis, atheroma of the aorta, aneurism of the aorta, pressure of a tumor narrowing the lumen of the aorta, dilatation of the vena cava, aneurism of the heart walls). Is it diastolic? (aortic regurgitation, pulmonary regurgitation, aneurism). Having established the fact that the murmur is presystolic, systolic or diastolic, the next step is to seek for the point of maximum intensity of the murmur, and the point of greatest loudness is usually the seat of origin of the murmur. Exceptions to this statement are occasionally found in the murmur of aortic stenosis, which may have its point of apparent greatest intensity in the pulmonary rather than in the aortic area, and in aortic regurgitation, where exceptionally the maximum point of intensity is toward the mitral area rather than in the second intercostal space of the right side, the murmur having "gone underground," as it were. The line of transmission of the murmur must next be ascertained. Most organic murmurs

are sufficiently loud to be transmitted, with the possible exception of a mitral stenotic murmur, which is generally, while heard with its greatest intensity just inside the mitral area proper or a little above that point, rarely transmitted.

While important in separating murmurs, when there are several to be heard during auscultation, the "transmission" often fails to give information because the murmur is not transmitted, owing to the weakness of the circulation or owing to the fact that a murmur is so loud that it can not only be heard in its proper line, but anywhere in the chest, up into the vessels of the neck and down into the vessels of the abdomen. Obviously murmurs so transmitted destroy all the practical considerations concerning their diagnostic value; and in demanding that a weak murmur be transmitted, before it is considered organic in origin, equally leads to grave errors. Just a little common sense in regard to this question of transmission of murmurs will be of value. The question of hypertrophy of the several chambers of the heart or of a particular part is now to be determined, not only by the change that occurs in the heart sounds themselves, but by recourse to percussion. The question of associated hypertrophy or dilatation with a given heart murmur is of greatest moment in determining the possible significance of a murmur, for a murmur may represent organic disease or it may represent "nothing," so far as our present knowledge goes. An organic murmur is said in the text books to have certain specific characters, but practically this is not so. The significance of a murmur depends altogether upon associated conditions. A murmur may be organic, and represent stenosis of a valve, or regurgitation, or roughening, or be due to dilatation of the heart (relative insufficiency); it may be hæmic and mean a condition curable by chalybeates, or still hæmic, and represent an organic lesion, but not of the valvular type, as in the heart of patients suffering from pernicious anemia, leucocythemia, etc., which while not representing actual mischief with the openings or valves, argue for a condition of dilatation or degeneration so severe as not to be recovered from, and are, indeed, more dangerous prognostically than the more classical murmurs of valvular origin. These murmurs, which occur during the progress of severe acute diseases, may also be organic or not. Often they represent temporary dilatations, deficient muscular action of the heart muscle, of the valvular sphincters, of the papillary

muscles or of the chordæ tendinæ; more frequently they represent mild or grave myocarditides, dependent upon the toxemia of the malady with which they happen to be associated, and often they represent the onset of an endocarditis, simple or malignant. It is sometimes quite possible to interpret the exact significance of these modifications or additions to the heart sounds during acute disease; often considerable time must elapse before they can be correctly assigned to their proper causes, and perhaps still oftener they disappear with the convalescence of the patient. A murmur that grows in intensity from a scarcely perceptible sound into a quite intense murmur, in which temporary variations in loudness may occur, but on the whole a growing increase in loudness up to a certain point, is very likely to be the murmur of an endocarditis. Let me warn you to be prepared to recognize an endocarditis in any disease in which morbid materials circulate in the blood which can irritate the heart valves. The sum total of endocarditic attacks in other than rheumatic diseases outnumber those due to rheumatism itself. In acute disease a "muddiness" of sound that develops into an appreciable murmur may mean a endocarditis or one of the other causes mentioned. Again, murmurs may be accidental, and of these we know little, save that we can auscultate them, but can find no corroborative evidence by which to interpret their significance. There will be fewer accidental murmurs found when the heart is examined frequently, and when the whole heart and vascular system is gone over, and when no attempt is made to interpret the meaning of these accidental murmurs by auscultation alone. All heart concomitants are to be taken into consideration before a definitely recognized murmur can be said to be "accidental." It is far better to withhold an absolute diagnosis than to declare that such murmurs mean nothing. Patients with these "accidental" murmurs live for years, and this fact is supposed to indicate that they were innocuous; but many cases of well-recognized and indubitable valvular disease pursue the same benign course, and their possessors may even pass through most acute disease, and yet show no signs of essential heart failure attributable to the valve affection or its secondary consequences per se. Hold an accidental murmur under suspicion until you are able to assert positively that it does not represent a lesion.

The data by which the significance of a murmur is inter-

puted is usually all sufficient for a diagnosis, if all the available data be taken into account, remembering, meanwhile, that a murmur is only one sign of a defect in a valve or an orifice. Take, for instance, the most common of all valvular defects, mitral regurgitation, we would sum up about as follows: A systolic murmur, heard in its greatest intensity at the position of the apex beat, the murmur being transmitted laterally, the pulmonary second sound being accentuated, and the right and left ventricles somewhat hypertrophied, the hypertrophic enlargement being greatest in the right heart. This evidence is sufficient to diagnose the lesion. The data for the diagnosis of the other valvular lesions is sometimes even more striking, particularly in the case of tricuspid regurgitation or aortic incompetency. In combined lesions the different murmurs are traced to their maxim points of intensity, their lines of transmission are ascertained, the accentuation of the second sounds and the diminution of or obscuration of first sounds, and the varied hypertrophies serve to enable one to make, in most instances, a satisfactory diagnosis of the valvular affection; and, what is more to the point, determine whether the lesion is seriously affecting the heart's working power as a pump. In deciding the question of competency to do work, despite the lesion, the subjective symptoms of the patient, the condition of the venous system, the state of the lungs, of the digestive organs, the liver and kidneys, and often the brain, decide the question.

Pericardial murmurs, so-called, are also appreciated by auscultation. These sounds should not be called murmurs, but what they are, "friction" sounds. They are nearer the ear than the endocardial murmurs. They can often be increased in intensity by pressing in the intercostal spaces, and they do not as exactly time themselves with the heart sounds as do the murmurs produced within the interior of the heart, although still keeping in fairly uniform accord. Produced as they are by the rubbing together of opposed roughened surfaces, as the heart in systole twists to the right, and in diastole again, when the heart twists back from right to left, they are often double. When recognized, unless very loud, they are not often heard outside the præcordial region, but occasionally, as I have had the opportunity of noting, they are so intense as to be heard all over the chest. Sounds produced in the lungs, simulating pericardial friction sounds, may some-

times be gotten rid of, and the differentiation simplified, by having the patient cough.

A pleural friction sound may be made to disappear by suspending respiration temporarily, and if the friction sound over the pericardium continues it is likely to represent roughening of the pericardial surfaces, and this roughening, in by far the greater majority of cases, means the first or last stage of a pericarditis. It may or may not disappear when effusion takes place. I have known a pericardial friction sound to continue a year after recovery from pericarditis, finally being made to disappear, probably the roughness having been at last smoothed out by the constant attrition of the heart motions. Ordinarily they disappear when adhesion takes place between the opposing surfaces.

A word as to the manner of ausculting. The ear is the best instrument. With that organ well trained you need no help from instruments; but there are a good many cogent reasons, aside from simple convenience, why a stethoscope is often preferable to the ear. Beware of the phonendoscope in estimating the amount of muscular power possessed by the heart. Sounds are often so intensified that you may think you have fair muscularity, and the patient show to ordinary auscultation a scarcely appreciable amount of muscular power and a grossly failing heart. This instrument does not transmit "quality" well.

I have not, in this paper, attempted to cover anything like the whole field of cardiac diagnosis, nor to even give full details as to technique, nor have I attempted to make a single diagnosis. My object now is simply to indicate to the general practitioner the range even an ordinary diagnosis of a cardiac affection may have to take. An examination of the heart, ordinarily simple, may take a most complex turn before the diagnosis is complete.

ANALYTIC STUDY OF CARBO ANIMALIS.

BY

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NERVOUS SYSTEM.

I. MIND AND SENSORIUM.—I. *Low-spirited*. Reflective, taciturn or *apathetic*. Mental debility. *Anxiety*. *Inclination to be frightened* (BORAX., CALC. C., KALI. CARB., SILICA). Nostalgia (PHOS. AC.). Sorrowful feeling, as if left alone; cannot be consoled. Alternate cheerfulness and sadness. 2. *Vertigo* and confusion (CARBO. VEG., PHOS.) on sitting up; > when reclining; with nausea. *Brain feels as if loose*, during motion. *Weakness of memory*, forgets the word which he is about to utter. *Confusion of the mind*.

2. SPECIAL SENSES,—*Farsightedness*. Sensation as if the eyes were lying loose in the orbits, with weak sight. *Smarting and itching in the eyes*; burning after rubbing. *Blepharitis*, with agglutination of left lid. *Dimness of sight*. Fungus hematodes in the orbit. Ringing in the ears, when blowing the nose. *Hardness of hearing*; does not know from what direction sounds come. *Otorrhœa, ichorous, offensive discharge*. Stoppage of nose. *Coryza*, fluent, with red, swollen tip of nose, or chapped and burning. *Crusty eruption in the nostrils*. Painfulness of the nasal bones.

3. SENSATION AND MOTION.—I. *Burning pains* (ARSENIC., CARBO. VEG., SULPHUR). Itching over the whole body, in the evening, in bed. *Lancinating or cutting in the glands*. *Empty gone feeling in the pit of the stomach*. (SEPIA). *Coldness of the abdomen* (AETHUSA., AMBRA). *Sensation as if the eyes were lying loose in the orbits*. Feeling of smothering on closing the eyes. Pressive headache. Pain in the top of the head, *as if the skull had been crushed*. Painful sensitiveness of the skull and scalp, especially to pressure. Bruised feeling in the limbs (ARNICA), particularly during motion. *Numbness of all limbs* (ACONITE., RHUS. TOX.) *Feeling of sprain in the joints*. 2. Muscular debility. *Weakness of the joints*. Limbs are easily sprained from lifting. *Easily exhausted by walking*. When walking, painful tightness in the calves. Straining and overlifting is followed by exhaustion.

VEGETATIVE SYSTEM.

4. NUTRITION.—Impaired metabolism. *Weak digestion. Cachectic, earthy complexion.* Low vitality. Emaciation. *Defective lymphatic system. Scrofulosis* (eyes, ears, nose, glands, skin, bones affected). *Sypholidermata* (blebs, papules, pustules). *Syphilo-glandular affections.* *Buboes.* *Gummata.* *Periostitis.* Falling of the hair. *Infectious adenitis.* *Induration, suppuration, ulceration of the glands of the neck, axilla, mamma, or groin* (BADIAGA., BARYTA JOD., CONIUM, PHYTO-LACCA., PHOSPHORUS, &c.). *With stabbing, cutting, burning pains.* Crusty eruptions on the head. *Copper-colored eruption in the face and on the nose.* *Glandular swellings become scirrhus.* *Cancer.* Adenoids. Colloid deposits in viscera. *Induration and scirrhus of the uterus.* Sluggish inflammation tending to suppuration or death of the part. Hypertrophy of the internal and external organs. Adenoid acne. *Acne hypertrophica and indurata.* Facial erysipelas (CANTHARID). *Venous plethora* (abdominal, blue cheeks, blue lips, blue finger-nails, &c.). *Hemorrhoids.* Varices.

5. SECRETION.—Dryness of mucous membranes. *Thin, offensive exudation, or thin, ichorous, bloody or excoriating discharge* (ARS. JOD., CARBO. VEG., ASAF., SILICA). *Purulent, acrid discharge, from the ear, nose, eyes, vagina, &c., with stinging and burning.* A viscid, inodorous humor oozes out of the anus, which is sore. *Sputa, purulent, offensive.* Loose râles until mucous is coughed up. *Night sweats.* *Stools, scanty, delayed.* *Constipation.* *Menses too early, not too profuse, but last too long.* *Leucorrhœa, staining the linen yellow.* *Lochia, long continued, thin, offensive and excoriating.*

6. DIGESTION.—Dryness of the mouth, tongue and palate. *Bitter taste.* Ravenous hunger. *Aversion to fat food.* Eructations tasting of food eaten long before. *Persistent nausea* (IPECAC) after eating animal food. *Heartburn.* Teeth very loose; cannot masticate the softest food. *Weak digestion.* *Acidity.* Fermentation. Pressure or spasms in the stomach. *Cutting, griping, burning in the stomach.* After eating, *fatigue, distress and burning in the stomach.* *Faint, gone feeling in the pit of the stomach* (SEPIA). *Retching and vomiting.* *Saltish water runs from the mouth.* Waterbrash. Aching, cutting in the region of the liver. Abdominal distention. *Incarcerated flatulence* (LYCOP.). Audible rumbling in the ab-

domen. Coldness about the stomach. *Constipation; unsuccessful desire for stool*, passes only offensive flatus. Backache and feeling across the abdomen, as if there was no expulsive power. *Piles burning, stinging*. Fissure in anus, with severe burning. Stitches in rectum and anus.

7. CIRCULATION.—Venous system predominant. *Lymphatic system supreme*. Beating in blood vessels. *Abdominal plethora* (hemorrhoids, varices etc.) Capillary stagnation (*blue cheeks, blue lips, blue finger-nails, &c.*) Palpitation after eating. Pulse accelerated, especially in the evening. *Prolonged menstruation*, though the flow of blood is not profuse. Throbbing headache after the menses. *Metrorrhagia* from malignant disease. *Menorrhagia* from chronic induration of the uterus. *Blood dark*. Nosebleed preceded by vertigo, or by a sensation of heaviness in the head, especially in the morning.

8. RESPIRATION.—Laborious breathing. Oppression of the chest, especially in the evening or at night. *Rattling and wheezing in the chest*, in the evening in bed. Suffocating constriction in the chest, in the morning in bed. *Sensation of coldness in the chest*. Stitches in the right side of the chest, at every inspiration or by coughing. Stitches in various parts of the chest, with arrest of breathing, or with dry cough, which increases the pain. Dry, nocturnal cough brought on by tickling in the larynx (RUMEX), or attended with constriction of the throat and spasm of the chest. *Suffocative, hoarse cough* (SPONGIA., BROMIUM), with pain of excoriation in the throat, or producing a shaking loose feeling of the brain. *Hoarseness and roughness in the morning*, after rising, with dry cough. *Extinction of the voice at night*. Cough with discharge of green, purulent offensive sputa; of sour taste, usually coming from a vomica of right lung. Cough with purulent expectoration and stitches in the right lung. Coughing causes abdominal soreness.

9. CAUSATION.—*Scrofulosis. Tuberculosis. Syphilis. Cancer*. Exposure to cold. Loss of vital fluids (CARBO. VEG., CHINA.). *Lactation* (CALC. PHOS., CINCHONA, PHOS. ACID.). *Fat food* (PULS.). Animal food. *Salt food* (CARBO. VEG.). Venous. *Plethora. Old age*. Lowered vitality. Smoking. Storms (RHODO).

10. RELATIONSHIP—CARBO. ANIMALIS is said to be antidoted by ARSENICUM, CAMPHORA, NUX VOM. and VINUM.

It bears many points of resemblance with BARYTA JOD., ARSENICUM JOD., MERC. JOD., BADIAGA., ASTERIAS., JODUM., PHOSPHORUS, SILICA and SULPHUR. It has been compared with BOVISTA., CALC. CARB., CALC. PHOS., IPECAC, MERCURIUS, NAT. MUR., RHODODENDRUM, SELENIUM and SILICA. It is complementary to CALC. PHOS. in glandular affections. It should be further compared, in indurated glands, with BARYTA, BELLADONNA, CALC. CARB., CLEMATIS, CONIUM, GRAPHITIS, LYCOPODIUM and SULPHUR. In mastitis, with BELLAD., BRYONIA, CONIUM, LACHESIS, MERCURIUS, PHOSPHORUS, PHYTOLACCA, SILICA and SULPHUR. In cancer of the breast with ASTERIAS, HYDRASTIS, LAPIS ALBUS., CONIUM, CONDURANGO. In indurated buboes, with BADIAGA, MERC. BIN-JOD., NITRIC ACID. In indurations of the cervix uteri, with SEPIA., AURUM., CONIUM, KREOS., NAT. CARB. and PHOSPHORUS.

A comparison with its congener, CARBO VEGETABILIS, deserves especial notice. In the first place, CARBO. ANIMALIS contains *Calcium Phosphate and Sulphur*, which CARBO. VEGETABILIS does not, and in the second place both contain *Carbon* and *Calcium Carbonate*, and these facts may explain why the two drugs have so many symptoms in common and why they so differ in certain spheres. They certainly do not follow each other well and in many points they are inimical. It is remarkable that CARBO. ANIMALIS should have proved to be complementary to CALCARIA PHOSPHORICA in *glandular affections*, just as CARBO. VEGETABILIS is complementary to KALI CARBONICUM in *chest affections*, as if their constituents were still operative in the compounds. A careful analysis of both remedies will further show that while CARBO. ANIMALIS tends to *constipation*, CARBO. VEGETABILIS tends to *diarrhœa*, and these have been for years my guide in the selection of these drugs, especially in *digestive troubles*. Both are indicated in *weakness of digestion*, principally when it occurs in the aged, or in those debilitated by *loss of animal fluids*, as in prolonged bleeding or lactation, but marked *fermentative changes* are not so common in CARBO. ANIMALIS. Both are *venous remedies* which alter the composition and supply of blood, causing degenerative changes (*sepsis, gangrene, necrosis, cancer, &c.*), with *purulent discharges and burning pains*; but in no *vascular disorder*, with capillary stagnation, imperfect hematosiis, cyanosis and respiratory failure is CARBO. ANIMALIS indicated.

neither is the remedy for any loss of blood that is not due to *induration and malignant destruction of tissue*. It cannot take the place of CARBO. VEGETABILIS in any *condition of low vitality*, with general functional torpor, algidity, cyanosis, cold sweats and *impending collapse*. Both are also indicated in *adynamic states, of pulmonary and bronchial troubles*, as well as in *phthisis pulmonalis*, when there is marked destruction of lung tissue, with *purulent, offensive sputa*; but CARBO. VEG. has a better record in *chronic bronchitis with emphysema*, and in the *suppurative stage of pneumonia*, and CARBO. ANI. in the *latter stages of pleuritis with empyema*, a sero-fibrinous affection which finds its most frequent cause in *tuberculosis*. Whether the nature of the tissues involved, in the above conditions, has anything to do with these predilections, I cannot venture to say, but very probably it does. In *glandular and syphilitic affections*, of course, CARBO. ANIMALIS is more frequently indicated, and carries the preference.

THERAPEUTICS.

The synthetic semeiology of CARBO. ANIMALIS clearly shows that while it affects with nearly equal force, as CARBO. VEGETABILIS, the nervous system, blood-life and nutrition, it has an almost *specific action upon the lymphatic glands and their drainage areas*, meeting admirably those inflammatory changes brought about in them, by the single or combined effect of *Scrofula, TUBERCULOSIS and SYPHILIS*. And when we consider that nine-tenths of all the ills of the human race have their origin in the *alimentary tract and absorbent system*, we must give especial heed to the pharmacodynamic action of this drug. Even our early observers did not overlook its active influence on organic catabolism, especially of the inferior tissues and organs of the body, creating sluggish inflammatory conditions of the absorbent vessels (*indurations, adenitis, buboes*) and colloid and other malignant degenerations of the glands and viscera (*cancer, scirrhus, &c.*); and there is accumulated evidence, to fill a volume, as to its great value in *glandular affections of the axilla and groin*, and in *neoplasms of the breasts and uterus*.

And, here, without entering into a discussion as to whether *Scrofula* is or not a *tuberculous disease*, I wish to state that I do think no one has a right to declare tuberculous a low form of disease from which one gradually recovers and gets well,

without the presence of Koch's bacillus ever being discovered. With such cases the observant practitioner frequently meets in practice, and recent investigators, puzzled by the inconstancy of the bacillus, or by the power of resistance of the exhausted and enervated cells, against *tubercular infection*, have concluded that a scrofulous child may remain an *attenuated tuberculous* and then the cure takes place in the course of a few years, without any notable accidents. Others, equally qualified to speak, assert that it seems as if, in a scrofulous soil, *tuberculosis* has a tendency to be peripheric and curable. This is indeed a shrewd way of meeting the difficulty; but where is the physician ignorant of the fact that *Scrofula* may terminate in an entire cure, even after *amyloid degeneration* has occurred? And who can deny that in the majority of cases the enlarged glands of the skin and mucous membranes undergo resolution, remain indurated and frequently suppurate, without further consequences? Not once, but many times, have I treated *ganglionic tumefactions of the neck*, which healed up and got entirely well, without any evidence of true tubercular infection ever developing. Of course, any condition of low vitality, whether inherited or acquired, may place the individual in a state of receptivity, and, under certain influences, become the prey of tubercle, but clinically, at least, let us separate two conditions with such different issues, and call *Scrofula*, if you so like it, a *pretubercular state*, but it will be convenient to retain the name for those cases which recover and may never suffer from *later tuberculosis*. There is conclusive evidence that the same proclivity to become tuberculous may be brought about by *syphilis*, and if this is the case, there we have a suitable soil for the action of CARBO. ANIMALIS.

But, be this as it may, even when the *indurated glands* caseate or become *secondarily tuberculous*, we may find in CARBO. ANIMALIS an excellent remedy, for it has shown itself to be one of the best to combat those *inflammatory and suppurative lesions* developed under a defective lymphatic system; a *cachectic condition*, frequently hereditary and arising from parental ills or infirmities, such as debility, chronic pneumonia, phthisis pulmonalis, syphilis and previous scrofula, or due to causes which throw an excess of work upon the lymphatic glands. It is thus that some external influence as vaccination, a wound, a cold or an attack of measles or whooping cough may cause the outbreak of a dormant or *latent scrofula*.

Of all diseases of the absorbent system, it is in *lymphatic adenitis* where CARBO. ANIMALIS has proved to be a most useful remedy, but principally in *infectious parenchymatous mastitis*; that is, when the irritant has traversed the drainage area, lodged in the glandular substance of the breast and produced *chronic indurations*, or terminate in *indolent suppuration* (Phlegmonous mastitis) a thin, *sero-purulent discharge*, with or without *fistulous openings*. Another variety of *mastitis* calling frequently for this drug is due to the entrance into the vessels of micro-organisms or cells from *malignant growths*. It is, however, very rare to find bacilli in the vessels, though *tuberculous deposits*, containing tubercle bacilli, have been found in the thoracic duct. The bacilli found in glands are generally those of the specific diseases (*scrofula, tuberculosis, syphilis, glanders*). Malignant cells also correspond to those of the original disease, whether *carcinoma* or *sarcoma*. If micrococci be present, they are nearly always of the staphylococcus forms, and, as a rule, *suppuration follows*.

During the *puerperal state*, the infecting material gains access to the gland through a fissure in the nipple, and *mastitis* of this origin is most often seen in women with poorly developed nipples, where the efforts of the child to nurse wound the epithelial covering of the nipple, and infectious material from the vagina or the child's mouth enters through the abrasion. We should bear in mind that many cases of *mastitis* are due to death of the fetus or inability of the mother to nurse her infant, and early intervention may avoid much trouble and unnecessary suffering. The indications of CARBO. ANIMALIS in these cases are *extreme sensitiveness of the nipple, intolerance of infant at the breast and darting pains*, interfering with breathing and aggravated by the least pressure. Even in *neglected cases*, when the gland becomes honeycombed by suppuration and the pus burrows in the axilla, this drug may prove beneficial.

In *chronic induration* or *indolent suppuration of the lymphatic glands*, there are very few drugs which offer the clinician better promise of success. In fact, its therapeutic influence over *scrofulous* or *syphilitic adenitis* is something surprising, particularly when after long-standing induration the ganglionic tissue breaks down and ulcerates, with burning, stinging pains, and a thick, acrid, sero-purulent discharge. It has acted with favorable energy in those cases needing the exfolia-

tion of pathological products and even of necrosed bones, often becoming a complementary, both of PHOSPHORUS and SILICA.

Under certain circumstances the lymph-vessels are also involved in *lymphangitis*, and if this inflammation, instead of going on to suppuration or subsiding as the primary cause is removed, ends in *chronic induration*, CARBO. ANIMALIS may render us good services. The same may be said of *farcy*, when the subcutaneous nodules with the *lymphatic lesions* are the prominent feature, and especially if the *nodulated lymphatics* look like cords. It has been prescribed for *chronic cases of glanders*, where the local lesions predominate, such as *indolent ulcers*, with thick, hard, unhealthy-looking, everted edges; inflammatory swellings beneath the skin and *loathsome ozena*. Various cases of *lymphadenoma* (Hodgkins' Disease), treated with CARBO. ANIMALIS, have been reported.

CARBO. ANIMALIS has produced and cured not only *glandular affections* of strumous and syphilitic origin, but *mucous and cutaneous lesions* from the same source. Repeated colds attended with *chronic engorgements of the lymphatic glands and mucous membranes* are often followed by lesions in which this drug has proved curative. It has been employed with good results, in *chronic nasal catarrh*, with thin, offensive discharge and *crusty eruptions in the nostrils and lips*, sometimes with painfulness of the nasal bones; in *scrofulous and syphilitic ozena*, resulting from periosteal ulceration, with thin, purulent exudation and of a disgusting odor; in *blepharitis* with agglutination of the lids and much smarting and itching; in *adenitis meibomiana hordeolum*, with indurated lids and falling of the lashes; in otorrhœa, with ichorous, fetid discharge, hardness of hearing and tumefaction of the parotid gland, especially if the petreous protuberance is swollen and sensitive to touch, and in the burning, acrid *leucorrhœa of strumous subjects*.

It has also been successfully prescribed in various *skin lesions of cachectic individuals*, such as *crusty eruptions of the hairy scalp*, with violent itching and sensitiveness to pressure, and *scrofulodermas*, which begin as painless hard lumps, suppurate in the centre and give rise to *ulcers with flabby granulations*. Likewise in *syphilodermata* (bullæ, papules, pustules), which may mimic almost every known form of skin eruption and exhibit a *coppery hue*; they always leave a pigmented stain of this color after absorption. Some authorities believe that this *syphilitic pigmentation*, so analogous to ute-

rine chloasma and Addison's Disease, must be under the dependence of an eventual lesion or functional trouble of the pericapsular nervous apparatus, the lesion or trouble being provoked by the syphilitic virus (Darier).

Other *syphilitic lesions* under the curative influence of this remedy are: *Indolent chancres*, with indurated borders and thin, offensive discharge; *indolent* or *virulent buboes* secondary to venereal disease, *with lancinating or cutting, burning pains*; and *rupia, alopecia, mucous patches* and *gummata*, which when in connection with joints and periosteum, are frequently confused with *sarcomata*. In *congenital syphilis*, especially if associated with *pemphigus*, or where the pigmentation has a coppery tint, I think this drug has been neglected. I attribute its superior properties here largely to the fact of its great power upon the absorbent system and metabolism. It seems to bring about those nutritive changes of repair, so necessary to resolve and disperse pathological formations of low type and indolent nature. Its curative range comprises also *periostial* and *osseous lesions of syphilitic and tuberculous origin*, particularly *when benignant suppurations become virulent*, with ichorous discharge and rending, tearing pain. It has also been recommended in *scurvy*, with bleeding of the gums and looseness and sensitiveness of the teeth.

CARBO. ANIMALIS has a favorable influence upon *cancerous growths*, especially when the stroma of the tumor is abundant (*scirrhus*), or when the *lymphatics* of the invaded areas, carrying reproductive cells to secondary deposits, are found indurated and swollen. It becomes a remedy when the *cachexia* is fully developed, and the *mamma*, or *uterus*, are the affected parts. It has also been mentioned in connection with *colloid cancer of the stomach*. In *scirrhus of the mamma* it should be prescribed, when the breast is nodulated, of a dirty-bluish color, with a *burning drawing towards the axilla*, and the indurations extend to the arm-pit. Likewise, when the gland breaks down, caseates, ulcerates, fistulates and suppurates a thin, corrosive, offensive, sero-purulent fluid, especially if the parts look spongy and angry, and have a coppery-bluish cast. It has been frequently given in *scirrhus of the womb*, when the burning pains are intolerable, and there are besides pressive pains in the loins, groins and thighs, more or less numbness of the limbs, and a thick, yellow leucorrhœa. *Scirrhus induration of the neck of the womb*, as well as *chronic induration of*

the womb, are causative of a *menorrhagia* said to be under the curative action of this drug.

CARBO. ANIMALIS shares honors with CARBO. VEGETABILIS in *atonic dyspepsia of the aged and cachectic*, with distressing, burning pains, acidity and pyrosis; but, while anguish, flatulence, oppressive breathing and putrid diarrhoea indicate the latter; constipation, coldness of the abdomen and a faint gone feeling in the pit of the stomach indicates the former. Any careful observer must have noticed that retention and not expulsion is the chief action of CARBO. ANIMALIS in the bowels. Another characteristic symptom of this drug, worth considering in these cases, is a *feeling of weakness across the abdomen*, as if there was no expulsive power, which, together with the coldness of the abdomen, the epigastric distress and the constipation, form a most unique syndrome. When, instead of the feeling of weakness mentioned, there is a free expulsive action of the bowels and a sensation of complete emptiness in the abdomen, remaining a long time after stool, then CARBO. VEGETABILIS should be preferred.

In the curative range of CARBO. ANIMALIS are included various *respiratory affections* of importance. This drug irritates and excites the mucous membranes of the respiratory tract and the pleura, with nearly as much power as the absorbent glands connected with them. Prompt and signal results often follow the administration of this remedy in *senile catarrh*, or in long-lasting *bronchial troubles* of the cachectic, with greenish, offensive sputa, feeling of coldness in the chest and glandular stigmata. Also an excellent remedy for those cases of *bronchitis*, where the peribronchial condition has followed the endobronchial and there is a *predisposition to phthisis*, or if complicated with *pleurisy*. I have seen this remedy to effect the happiest results in allaying *pleuritic irritation and pains*, with evening fever and progressive emaciation; and Wurm and other old teachers recommended highly in the advanced stages of *pleuritis*, with *empyema*, or in *lingering pleurisy*, with burning stitches in the chest and night sweats. It has likewise allayed local irritation in the *chronic laryngitis* of old syphilitic and tuberculous patients, with hoarseness starting in the morning and ending with extinction of the voice at night. It is also claimed to be beneficial in *sub-acute laryngitis* or *trachitis*, with dryness, rawness, hoarseness and oppressive cough at night, especially if the chest feels cold at each inspiration, and

there is during the day a grey-greenish, sometimes purulent expectoration of an offensive odor and taste. But none of the troubles for which it is the remedy ever exhibits the extreme respiratory failure of CARBO. VEGETABILIS.

Wherever indicated, if we wish to penetrate the living cells and reach the diseased tissues, we must never give this remedy too low. That much, strange to say, the busy biologist of the day has found for us.

ARGENTUM NITRICUM: A PRACTICAL STUDY.

BY

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Argentum nitricum has two great spheres of constitutional activity: the gastro enteric; the neural. The toxic syndrome is exhibited in gastro-enteric inflammation and catarrh; tissue-waste, uremic symptoms, albuminuria; fatty degeneration (cardiac, hepatic, renal); hematic deliquescence, hemorrhage; centric impairment of the nervous system, causing extensive paralysis, inco-ordination, tremors, convulsions. Large doses produce a violent gastro-enteritis and gastric ulcers due to venous thrombosis.

Silver develops profound cachexia; particularly useful in cachectic patients with motor disturbances, of which marked debility of the lower limbs is peculiarly characteristic of the nitrate, or with cachectic individuals who have acute, subacute (gastric ulcers) or chronic derangement of the gastro-intestinal tract. Where silver nitrate is indicated externally, as in gonorrhœa (only indicated locally in the second stage of the process, when the initial pain and sensitiveness have abated, and the catarrhal secretion is fully established) reference to its pathogenesis will probably lead to its use internally in the 6, 12, 30 dilution. The writer has apparently aborted suspicious urethrites in markedly nervous patients by the immediate use of the 30 dilution, dose every two hours. Its chief use internally seems, however, to be in subacute or chronic processes, typified in the gastric ulcer, rather than in acute conditions (unless with a cachectic *basso profundo*).

GASTRO-ENTERIC SPHERE.

Gastric Ulcer. Chlorotic; prodromal dyspepsia and with the development of the ulcer, violent epigastric pains in crises, often

with vomiting. Hematemesis sudden, rapid, copious. Pain at the xyphoid radiating to the corresponding dorsal vertebrae, gastralgia and pyrosis excited or aggravated by eating, or vomiting after any food but milk. Flatulence, nausea and palpitation, pain increases and decreases gradually, and is sometimes relieved by hard pressure.

(*Atropina*. Pressing pain after eating; vomiting of sour masses, setting the teeth on edge; stomach very sensitive to touch; excruciating gastralgia; constant vomiting; deadly pallor of face with cold sweat and cold hands and feet. Pulse very small.

Kali bichromicum. Gastric ulcer with the concomitant syndrome of *reflex intercostal pain, constipation and alveolar abscess*. In vomited mucus are clots of bright-red blood, size of a hazel-nut; mucus is glairy, ropy; scrobiculum sensitive, and slightest touch causes tendency to vomit.

Raue notes that cases of round ulcer generally have a *clean, red tongue*).

Intestinal Inflammation and Catarrh. Diarrhœa is predominant, characteristically grass-green and shot out forcibly with much spluttering. It is aggravated after candy or sweets, from drinking, at night, early morning and 6 A. M. There is a psychic diarrhœa, reflex from emotional disturbance, fear, fright, apprehension. As the drug is not particularly loquacious, it will not answer in a "diarrhœa of words," though not infrequently indicated where there is a "constipation of thought." There is soreness and burning in the region of the sigmoid; fluids seem to roll through the thirty feet of intestine without stopping. Much flatulent colic; nausea with loud eructations; ineffectual efforts to eructate, causing strangulation, which is finally relieved by forcible belching. The paroxysm is preceded by yawning and followed by exhaustion and deep sleep. Sudden and severe cholera infantum with the characteristic stools, in children addicted to and over-filled with candy.

NEURAL SPHERE.

Cephalalgia.—Migraine with tearing pains, especially marked in the left frontal eminence and better by binding the head

tightly. Gastric headache in nervous individuals, < in the open air, > from bandaging, accompanied by chilliness, trembling, intense nausea, vomiting; great debility of the lower limbs.

Epilepsy.—Pupils dilated a day or two before the attack, which is apt to be nocturnal or in the early morning on rising; aura rises slowly from gastric region, which feels oppressed. Head dull and stupid; mind exceedingly depressed and melancholy; convulsions sometimes preceded by active cerebral congestion; epilepsy due to fright or occurring at the menstrual epoch. After the fit the patient is very restless and trembling; great debility of the lower limbs.

Locomotor Ataxia.—Argentum nitricum and a number of other remedies present most of the classic symptoms of tabes. Differentiation must be made through *keynotes*, e. g.

Sensation of enormous enlargement of the head.

Peculiar numbness, accompanied by hyperesthesia.

Sensation of splinters sticking in various parts.

Impulsion to walk very fast, etc.

Multiple Spinal Sclerosis.—Sharp, darting pains in head, body and limbs; paralytic weakness in the back and limbs, particularly the lower limbs; trembling of the limbs; sensation of an epileptic aura; tremor, increased by nervous excitement; tingling followed by numbness in the hands and feet, often with a peculiar hyperesthesia of the numb part—hyperesthetic to touch, but with diminished power of distinguishing other sensations.

SOME OTHER SYMPTOMS.

Photophobic; snake-like lines appear in the field of vision, “serpentine dance”; red phosphenes.

Conjunctivitis extending from the caruncle toward cornea.

Purulent ophthalmia, pus thick, yellow, bland; better in the open air, worse indoors (Cf. Pulsatilla).

Throat dark-red, raspy, with a splinter-sensation and tenacious, abundant mucus causing frequent spitting.

Nocturnal pains in the scapulæ.

Ovarian pain with an aching “swollen” head.

Scrofulous adenitis with indurated glands, which do not suppurate.

Urethritis with burning pains and a flow of muco-pus after micturition.

Nephralgia from renal congestion or the passage of calculi with constant urging to urinate; urine dark and bloody.

Laryngitis with hoarseness to aphonia.

Ulcerated cervix uteri; leucorrhœa copious, yellow and corroding.

COMPARISONS.

The metals affect, sooner or later, the nervous system, frequently sooner. Their neural peculiarities will be of comparative interest, together with occasional keynote symptoms or clinical conditions not markedly neural.

Alumina.

Al₂ O₃ acts primarily upon skin and mucosæ; secondarily upon the nervous system.

Motor-paralysant, especially of involuntary muscle (constipation).

Sensory-paralysant—sensations are slow in reaching the centres.

Periodicity, < on alternate days.

Lower limbs very heavy—can scarcely move them.

Sensation of a hot iron forced through vertebræ.

The nates go to sleep.

Argentum.

Acts upon cartilage, joints, mucosæ and the cerebro-spinal system.

Cramps, electric-like shocks in joints and limbs.

Viscid, easy saliva and secretions—like boiled starch.

Deep cachexias—thin, hollow-eyed, pallid patients.

Epileptoid spasms followed by delirious rage.

Fulgurant pains.

Tender, painful, so-called “hysteric” joints.

Argentum Nitricum.

General debility and trembling of limbs.

Great weakness of the lower limbs (aluminum).

Epilepsy from fright; at menses; nocturnal.

Sensation of being squeezed in a vice.

Defective co-ordination.

Paralysis of motion and sensation.

Fears projecting corners, high buildings. They make him dizzy, or it seems as if the houses on both sides of the street would approach and crush him.

Aurum.

A physic drug; depressant.
Affects all tissues, dissolving them.
Suicidal; inclined to jump off heights.
Worse from sunset to sunrise.
Bone-ulcers.
Ozena.
Lues and hydrargyrum.

Cobaltum.

Fatigue, agitation, insomnia and bone-pains worse in the morning and from the least psychic storm.
Lumbar pains < sitting, > walking.
Backache, with seminal emissions.
Constant dropping of blood from the anus—no blood with the stool.
Excessive weakness of the knees.
Foot-sweat, mostly between toes, smelling sour or like sole-leather.
Effects of onanism.

Cuprum.

A motor-devil.
Neuropathic diathesis—tics, tremor, cramps, convulsions.
Fixed ideas—psychic cramps.
Abdominal pains like knife-thrusts—fears to move.
Periodic neural explosions.
A brain-fag remedy—insanity more frequent than imbecility.
Malicious—morally cramped.

Ferrum.

Primarily a hematic drug.
Great lassitude and weakness—almost paralytic.
Vaso-motor nerves easily shocked—with corresponding circulatory changes.
Cramps in the limbs (daytime).
Irritable bladder—incontinence of urine when standing.
Irritable bowels—causing diarrhœa while eating.
All symptoms > by slowly moving about.

Mercurius.

Disintegrates blood, thence acting destructively upon all tissues.
A human "thermometer."

Tremors, anywhere or everywhere; paralysis agitans.

Contractures.

Great weakness with ebullitions and tremblings from the least exertion.

Palpitation, with fear, < at night.

< in cold damp weather.

Niccolum.

Suits debilitated, weary, nervous literary cusses, with frequent headaches, dyspepsia and constipation.

Twitching of the upper lip at intervals.

Spasmodic hiccough with thirst, very troublesome at night.

Insomnia.

Diarrhoea from milk.

Nasal catarrh, abundant flow during the day, troublesome dryness at night.

Acute gastralgia with pains extending into the shoulder.

Palladium.

Motor weakness, aversion to any effort to exercise.

Love of approbation, which unsatisfied becomes a state of wounded pride and fancied neglect.

Right ovarian pain, > from pressure (Platina <).

Cephalalgia, across vertex from ear to ear.

Sensation of an animal snapping and biting off small portions of the intestines.

Undressing causes itching all over the body.

Temporo-parietal neuralgia with pain in the shoulder.

Platina.

The nervous system; the female genitalia.

Spasmodic affections of hysteric women, with wild shrieks, alternating with catalepsy.

A haughty and naughty nymph.

Right ovarian pain, < from pressure (Palladium >).

Extreme sensitiveness of the external genitals.

Premature and excessive development of sexual instincts and organs.

Tenacious, sticky, putty stools.

Plumbum.

An insidious paralytic.

Violent colic with abdominal retraction.

Constipation—sheep's dung.

Contractures.

Emaciation; muscular atrophy.
Takes strange attitudes in sleep.
Depressed, apathetic, imbecile.

Stannum.

Prostration.
Emaciation.
Paralysis.
Phthisis.
Profuse and early menses.
Pains, *crescendo-diminuendo*, < >
Retention of urine with absence of desire to urinate.

Tellurium.

Vertigo in the mornings.
Sacral pain, extending into right sciatic nerve.
Pruritus perinei, with vesicles.
Pruritus nuchæ.
Pruritus aurium.
Pruritus ani, after every stool.
Blepharitis with otorrhea (stinking, fish-brine discharge)
and retro-aural eczema.

Thallium.

Tabes.
Fulgurant pains.
Polyneuritis.
Dermal trophic lesions.
Chronic myelitis.
Rapid baldness.
Formication, beginning in fingers and extending through
pelvis, perineum and inner thighs to the feet.

Zincum.

Primarily a neural drug—cerebro-spinal (central and peripheral) and sympathetic.
Defective nutrition in children, with abundant mucous stools.
Fidgets; fidgety feet.
< from wine.
Toxemias from suppressed eruptions or discharges or over-exertion, mental or physical.
Excessive irritability.
Nymphomania.

SOME REMARKS ON THE CLINICAL MANIFESTATIONS AND TREATMENT OF PLEURISY WITH EFFUSION.

BY

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No discussion of the clinical aspects of pleurisy with effusion would be complete without a careful consideration of the etiology of this disease. The idea which formerly prevailed that cases of serofibrinous pleurisy developing in apparently healthy persons was a simple inflammatory process has been disproven by the results of more accurate methods of investigation. Exposure to cold, traumatism and conditions of lowered vitality are now regarded as predisposing, rather than as actual causes of this disease. The vast majority of primary cases of serofibrinous pleurisy are due to infection by one of three forms of micro-organisms: The tubercle bacillus, the pneumococcus or the streptococcus pyogenes. Secondary forms of serofibrinous pleurisy may occur during the course of typhoid fever, influenza, pneumonia, peritonitis, chronic nephritis and malignant growths of the thoracic viscera.

By far the most frequent etiological factor in cases of primary serofibrinous pleurisy is the tubercle bacillus. The frequency with which this organism is found, according to Coplin, varies from fifty-five to ninety-four per cent. of all cases observed. Former methods of searching for the tubercle bacillus in cases of tubercular pleurisy by means of cover-slip preparations or by cultures gave almost invariably negative results. This fact has led many pathologists to consider negative bacteriologic results as strong presumptive evidence of the case being of tuberculous origin.

The more recent experiments conducted by Netter, Eichorst and Aschoff, who inoculated animals with the pleural exudate, have given much more definite results. Netter obtained positive results in eight of sixteen cases known to be tuberculous, and ten of twenty-five cases which were supposed to be the result of exposure to cold. He concluded that forty per cent. of all primary exudates are tuberculous, and that in serofibrinous pleurisy the tubercle bacillus is the most common agent. Aschoff examined two hundred and twenty serous exudates, one hundred and ninety-three of which were negative micro-

scopically and by cultures. In thirty-seven of these cases animals were inoculated, tuberculosis resulting in sixty-eight per cent. Of these thirty-seven, twelve were so-called idiopathic pleurisy, tuberculosis resulting in seventy-five per cent. Le Damany, who made use of large quantities of the exudate, demonstrated the tuberculous character of all but eight out of fifty-five primary pleurisies. In four of the remaining cases tubercular lesions were found, thus leaving but four cases out of the fifty-five in which the presence of tuberculosis could not be demonstrated. He found cultures universally negative.

The clinical data showing the close relation of serofibrinous pleurisies to tuberculosis is no less conclusive than the results of inoculation. Rankin gives the following clinical facts, which go to prove the etiological relationship between tuberculosis and pleurisy with effusion: (a) A tendency to pleurisy in tuberculous subjects; (b) the association of pulmonary tuberculosis with serofibrinous pleurisy; (c) pleurisy arising suddenly in previously healthy persons has been shown by autopsy or by subsequent history to be tuberculous; (d) those who recover from this form of pleurisy frequently develop tuberculosis.

The post-mortem records of the Johns Hopkins Hospital were examined by Osler, who found that of one hundred and one cases of pleurisy of all types thirty-two were definitely tuberculous. He also stated, "I confess that the more carefully I have studied the question the larger does the proportion appear to be of primary pleurisies of tuberculous origin." In studying the subsequent history of sixty-two cases of acute pleurisy treated at the Leeds Infirmary, Barr found that six years later twenty-two of these cases had died of tuberculosis. Fiedler states that he investigated ninety-two cases of acute pleurisy in which the effusion was serofibrinous in character. At the end of two years twenty-eight were dead from pulmonary tuberculosis, forty-three he considered were probably affected with the disease and only twenty-one appeared to be in health. Of three successive cases of serofibrinous pleurisy recently seen by the writer, one gave a distinct history of pulmonary tuberculosis which had been active thirty-five years previous to the onset of the pleurisy, and physical examination showed the existence of a well-defined, though apparently quiescent, lesion in the opposite lung; the second case gave a family history of tuberculosis and also stated that his wife died

of tuberculosis. There were suggestive evidences of tuberculosis in his lungs and I have no doubt but that he had been infected to a minor degree by these germs for a number of years. The third case was tuberculous beyond a doubt, as the patient gave a history of two attacks of hemoptysis a year previous to the time she came under my observation but considered herself cured of whatever caused the hemoptysis. The physical signs in this instance showed the presence of a tubercular lesion on the same side of the thorax as that affected by the pleural effusion. In each of these cases the condition developed while the patient was in *apparently* good health and no exciting cause could be discovered.

The types of pleurisy to which the diplococcus gives rise are the serofibrinous or purulent pleuritis secondary to pneumonia, and the so-called primary empyemas of children. The exudation usually becomes purulent, but the prognosis is more favorable than in the purulent exudates due to other organisms.

The streptococcus pyogenes is the organism ordinarily found in the empyemas of adults, and is generally secondary to inflammatory conditions in other structures. Thus it occurs in association with pneumonia, abscess of the lungs, gangrene of the lungs, inflammatory processes in the thoracic wall, wounds of the chest and septic states of the blood. The prognosis in cases due to infection by the streptococcus is more grave than that due to the tubercle bacillus or the pneumococcus, but some cases make a complete recovery.

Aside from the organisms above referred to, many other bacteria are occasionally found in cases of pleurisy with effusion. Thus the typhoid bacillus, the colon bacillus, the staphylococcus and even the gonococcus have been found. Frequently the infection is of a mixed type. There are some cases found in association with rheumatic fever in which no bacteria have been demonstrated.

The manner of onset of serofibrinous pleurisy varies greatly. For clinical purposes, however, we may consider the initial symptoms under two general types: First, those in which the initial symptoms develop acutely and, second, those in which the initial symptoms develop gradually. In the first type of cases the onset is abrupt, often with a chill followed by sharp, stabbing pain in the side of the thorax, markedly aggravated by coughing or deep breathing. The pain is ordi-

narily located in the mammary or axillary region, but may be referred to the abdomen or low in the back. The temperature rises ordinarily to 101° to 102° , rarely going as high as in cases of acute pneumonia. There is usually some dyspnoea, due, at this stage, to the pyrexia and to the inability of the patient to breathe deeply. When effusion of the fluid occurs the pain is usually relieved to some extent.

The second and perhaps the larger class of cases of serofibrinous pleurisy begin insidiously. The patient may complain of feeling weak and of having some dyspnoea on slight exertion. There may be some pain in the chest, but frequently there is only a feeling of soreness, which the patient will often attribute to rheumatism or to an attack of indigestion. The temperature is slightly elevated at this stage, ranging in the average case from 100° to 101° . The pulse is accelerated. As the effusion increases the debility, the dyspnoea and the anorexia gradually increase. The temperature ranges in an average case from 101° to 102° , rarely exceeding 103° in an uncomplicated case of serofibrinous effusion. A temperature of 104° to 105° , associated chills and marked remissions is very suggestive of purulent infection. In a general way the temperature rises as the effusion increases, and drops by lysis as the effusion is absorbed. Not infrequently as the effusion is being absorbed the temperature will fall to about 100° and a hectic type of fever will set in, fluctuating about this point. Such cases are almost invariably tuberculous. The duration of the fever in an uncomplicated case is from one to three weeks. According to Peters, the axillary temperature in the axilla on the affected side is higher than on the healthy side.

The cough appears early in almost all cases, but is rarely a troublesome symptom. It is typically of a peculiar dry character, aggravated when the patient sits up or moves about and not accompanied by any expectoration. The cough is usually accompanied by severe, darting pains in the chest. If there is a marked bronchitis associated with the pleuritic inflammation there is a mucoid expectoration, while in those cases associated with pneumonia the sputum is often blood streaked.

Pain is a very characteristic symptom of pleuritic inflammation, and we have already referred to its chief characteristics. It must be borne in mind, however, that in cases of serofibrinous pleurisy, with gradual onset, *pain may be entirely absent* or be replaced by a slight soreness in the chest which the patient

may consider of no significance. While the pain is usually in the mammary or axillary regions, it is important to remember that it may be in the epigastrium, behind the sternum, beneath the clavicles, or it may radiate into the arm or shoulder. Accompanying the pain is more or less tenderness on palpation.

The pulse in the earlier stages of the disease is accelerated in proportion as the temperature is elevated. As the effusion increases it interferes to a degree with the action of the heart and the pulse rate is often markedly increased. Even after the effusion is absorbed and the temperature has returned to normal, the pulse will often remain accelerated for several weeks. Digestive disturbances are the rule after effusion has occurred. The more common of these are loss of appetite, thirst, belching of gas and at times vomiting. Many of these symptoms are no doubt due to the mechanical irritation of the exudate.

The course of serofibrinous pleurisy is variable. The disease may be said to have a febrile and a non-febrile period. The febrile period lasts from one to four weeks, depending upon whether the onset is acute or gradual. Cases which develop acutely run a rapid course, and in about ten days the fever usually subsides, and a small effusion will be quickly absorbed. In such cases the resolution may be complete in from four to six weeks. In the cases of gradual development the course of the disease is much more prolonged, the febrile stage lasting from three to four weeks, while the stage of absorption may vary from several weeks to several months. Not infrequently the effusion persists indefinitely and the disease becomes chronic.

Physical Signs.—The physical signs of pleurisy with effusions are so classical that it is only necessary to refer to them briefly.

During the early stages of the disease the signs correspond to those found in dry pleurisy, namely, tenderness on palpation or percussion, and dry friction sounds on auscultation. After effusion of fluid occurs the physical signs are more pronounced and are, as a rule, easily detected.

On inspection we find loss of expansion on inspiration and, if the effusion is at all extensive, displacement of the impulse beat of the heart. Edema of the skin on the affected side may occur, but this sign is more frequently found associated with purulent pleurisies.

Palpation furnishes us with one of the most important diag-

nostic signs of pleural effusion, namely, *the diminution or loss of tactile fremitus*. This is especially helpful in differentiating pleurisy from pneumonia, in which disease tactile fremitus is usually increased. We can also determine on palpation the location of the impulse beat of the heart.

By percussion we obtain a note which is at first dull and later absolutely flat. *The flat, wood-like percussion note associated with a sensation of resistance to the finger*, is characteristic of effusion in the pleural cavity. Above the line of effusion there is sometimes found a tympanitic percussion note—the so-called Skoda's resonance. In estimating the extent of the effusion the patient should sit in the erect position for several minutes and take a few deep breaths, if possible. With the patient in this position it will be found that the line of dulness is not horizontal, but follows a curved line, the height of the dulness being higher posteriorly than anteriorly. In moderate effusions the phenomena of movable dulness may be obtained, but this sign is not essential to a diagnosis of fluid in the pleural cavity.

Auscultation during the stage of effusion reveals the fact that the friction rub of the earlier stage has disappeared. *The respiratory murmurs are diminished*, and there is diminution or loss of voice transmission in most cases. As the fluid accumulates and the lung becomes more solidified by pressure we frequently find bronchial breathing present and bronchophony. Above the line of the fluid the breathing sounds are usually intensified. The transmission of the whispered voice is considered to indicate the presence of a serous effusion, and its absence to indicate that the effusion is purulent (Bacelli's sign). This sign is of doubtful value.

When the stage of absorption begins the physical signs gradually return to normal. A dull percussion note frequently persists over the base of the affected side for a long period. On auscultation we frequently observe a return of the pleural friction signs due to the rubbing together of the roughened surfaces of the pleura. These may continue for several months after all fluid has disappeared. If the case has been a long-standing one the lung may remain permanently collapsed.

In cases where the physical signs are doubtful the X-rays are of assistance in diagnosis. It is not possible, however, by this means to differentiate a serofibrinous from a purulent effusion.

Treatment.—The treatment varies considerably, according to the stage of the disease.

1. *The Febrile Stage.*—The main indications during this stage are *to relieve pain and to limit the amount of the effusion*. The patient should be put at perfect rest. We can best keep the chest at rest, and also do a great deal to relieve pain, by applying straps of adhesive plaster to the affected side. These straps should extend over on the healthy side both anteriorly and posteriorly, and must be applied during expiration to be of any use. Many local measures are recommended. Most of these act merely by relieving the pain and it is doubtful whether they have any effect on the inflamed condition of the pleural sacs. In the experience of the writer, the most effective application for the relief of the pain, and one which also has a favorable effect in promoting absorption of the fluid, is the *cataplasma kaolini* of the U. S. P. or some similar preparation. To be effective this must be applied as hot as can be borne by the patient, and covered with paraffined paper held in place by a bandage. This is allowed to remain on the chest for twenty-four hours and then renewed. Hot fomentations or the hot water bag may be employed, but are not as convenient or as effective as the method previously mentioned. Cupping, the use of blisters or mustard plasters, according to Osler, are of no use in this stage of the disease, except possibly to ameliorate the pain. The local application of ice is recommended, but heat is usually more agreeable and more effective. The diet should be light and readily digested as in all cases of acute fever.

There is no specific remedy for this condition in the *Materia Medica* of either old or new Schools. The use of antipyretics, the salicylates, the mercurials, etc., which are ordinarily employed by the old School in these cases are practically useless. A hypodermic injection of morphine may be necessary at times to relieve the severe pain. The most efficacious medicinal treatment in the febrile stage of pleurisy is the homœopathically indicated remedy, and this necessarily varies with the particular symptoms present. There are, however, a certain group of remedies which clinical experience has demonstrated to be adapted to a large percentage of cases, and these will serve as a foundation in selecting the proper remedy. Prominent among this group of remedies may be mentioned *aconite*, *bryonia*, *kali carbonicum*, *ferrum phos.*, *scilla* and *sulphur*.

2. *The Stage of Effusion.*—When effusion has occurred the chief therapeutic indications are *to promote absorption of the fluid and to support the patient's strength*. The most effective

method of promoting absorption of the effusion is by the application of hot cataplasms composed of glycerine and kaolin such as the *cataplasma kaoline* previously referred to. The hygroscopic action of the hot glycerine in these plasters absorbs large quantities of water from the skin, and appears to aid in the depletion of the pleural cavity also. Many writers advocate the use of counter-irritants in the form of mustard plasters, blisters, etc. These measures are of doubtful value, and their use is frequently followed by painful excoriations of the skin.

As to diet, this should be light, but highly nutritious, as it is important to maintain the patient's strength. It is always well to keep the amount of fluid intake rather low. In cases where absorption is delayed the dry diet may prove helpful. This consists of feeding the patient on meat, eggs and dry bread, with ten ounces of liquid in the form of milk or water daily. In addition to this, in robust patients, Osler recommends the administration of one and a half ounces of Epsom salts in as concentrated a form as possible, every second day. In his experience large effusions have disappeared rapidly under this method of treatment.

Diuretics and diaphoretics are seldom of any practical value, and tend to deplete the patient's strength; on this account they should be resorted to with great caution.

As a rule, if the effusion resists the ordinary methods of bringing about absorption, it is more satisfactory and safer to resort at once to aspiration. Broadly speaking, there are two classes of conditions which are indications for aspiration of the effusion, namely: (a) Symptoms dangerous to life developing during the acute stage, and (b) undue persistence of the effusion in the later stage of the disease. Thoracentesis is immediately indicated by any one of the following conditions: (a) Excessive orthopnoea or syncopal attacks with cyanosis; (b) when one pleural sac is completely filled; (c) in double pleurisies, when both sides are half filled; (d) in cases of copious effusion upon the first sign of involvement of the unaffected side, such as moist rales, dullness on percussion, etc.; (e) marked displacement of the heart, especially if murmurs develop.

The chief indication for thoracentesis during the second stage of the disease is to remove the exudate and thus prevent permanent injury to the lung. The following rules should guide

us in advising thoracentesis during this stage: (a) When there has been no diminution in the quantity of the fluid after the temperature has been normal for one week; (b) in sub-acute cases, where there has been little or no temperature from the beginning, if the fluid does not begin to show signs of active absorption by the end of three weeks. The presence of fever is not a contra-indication, as the fever will often drop to normal after aspiration. In many instances the effusion will not recur after aspiration, while in a certain percentage of cases the chest refills. Under such conditions the procedure may be repeated two or even three times with advantage.

The contra-indications for thoracentesis are the presence of croupous pneumonia, excessive debility and old age.

The operation of thoracentesis is entirely free from danger if performed under the proper precautions. The first essential is thorough asepsis of the skin and of the instruments employed. The puncture is best made in the seventh interspace in the mid-axillary line or in the eighth interspace at the outer angle of the scapula. It is preferable to employ a moderately large trochar or aspirating needle, as the smaller ones are frequently obstructed by plugs of fibrin. The instrument employed should be thrust into the chest close to the upper margin of the rib in order to avoid wounding the intercostal artery. A simple trochar or a Dieulafoy aspirator furnish the most satisfactory methods of removing the fluid. Strong suction by means of an aspirator must always be avoided, as it may lead to too rapid withdrawal of the fluid, resulting in syncope or oedema of the lung. An ordinary fountain syringe filled with an antiseptic solution and connected with the aspirating needle furnishes a very satisfactory method of securing all the suction necessary. The fluid should always be withdrawn slowly, and if a paroxysm of coughing, faintness or dyspnoea occurs the needle should be removed at once. The amount of fluid withdrawn at one time depends on the amount of the effusion. If the effusion reaches the clavicle a pint may be removed with safety. If, after repeated tapplings, the effusion still recurs free incision and drainage should be advised.

The medicinal treatment of the second stage, like that of the first, must be mainly symptomatic. The use of Epsom salts in order to promote absorption has already been referred to. The most important empirical remedies for promoting ab-

sorption are the iodides, especially the iodide of iron and the iodide of potassium. These remedies are administered in moderate doses, three times daily, as general tonics and absorbents. Among the homœopathic remedies, those enjoying the greatest clinical reputation are bryonia and cantharis. Sulphur is especially called for in those cases where there is no tendency to absorption. Arsenicum album, arsenicum iodide, apis, and kali carb. are remedies frequently indicated.

3. *The Stage of Convalescence.*—During this stage the indications are *to build up the general nutrition of the patient and to bring about a restoration of the lung to its normal size and elasticity.* The importance of these remarks will be appreciated when we realize the number of these patients who subsequently develop pulmonary tuberculosis.

The diet should consist of articles having a high nutritive value and the patient should be encouraged to eat liberally. The use of eggs and sherry or a quart of milk daily are valuable additions to the regular diet. The next important step is to institute massage of the chest to re-establish the vigor of the respiratory muscles and to have the patient perform light exercise of the chest, together with the systematic practice of deep breathing. Exercises, whenever possible, should be carried out in the open air. Patients rarely appreciate the necessity of these exercises, but I am satisfied that if they were carefully carried out in all suitable cases the percentage of cases of tuberculosis following pleurisy with effusion would be materially reduced.

The medicinal treatment during the stage of convalescence should be of a general tonic character. Iron, arsenic, strychnia and other tonics will often be of value. In prescribing a remedy for this stage the constitutional characteristics of the patient should always be given careful consideration.

DILATATION OF THE URETER FOR IMPACTED URETERAL CALCULUS.

BY

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(Read before the Homœopathic Practitioners' Association of Reading, Pa.)

J. M., age thirty-one, manufacturer, patient of Dr. Lukens, of Wilmington, Del., consulted me October 10th, 1905.

Since this case is one of unusual importance, I will outline his previous history and the treatment instituted. He had gonorrhœal urethritis eight years ago, and for six years has had urinary distress. He had a constant desire to void urine in the daytime and arose three or four times at night. The act was associated with some perineal distress as well as discomfort at the fossa navicularis. Acute pain was rarely ever present, hæmaturia never. The urine showed a mild opacity and contained some shreds. Rectal examination revealed constriction of the sphincter ani, congestion of the prostate and of the left seminal vesicle. The tail of the left epididymis was nodular. There was never any kidney pain, nor did palpation of this region elicit any tenderness. Urethroscopy showed a stricture of large calibre at both the fossa and the bulb, and granulations in both the posterior and anterior urethra. Cystoscopy showed normal bladder capacity, areas of healed cystitis and bulging of the prostate, especially of the left lobe. The right ureteral meatus was crescent shaped and spurted every twenty-two seconds; the left ureteral meatus was everted and its margin inflamed. It spurted every fifty seconds. Additionally he also has pulmonary tuberculosis and had been living for two years at Saranac Lake; while there the lung condition had improved, so that his appearance was that of a fairly healthy man.

Truly this was a puzzling case. As a matter of fact, he had chronic urethro-prostato-cystitis and seminal vesiculitis. He also had a long and fairly tight prepuce. But, in addition, did he also have tuberculosis of the left kidney? It was fair, at least, to suspect such from the clinical symptoms and examination, and especially since he had pulmonary tuberculosis. I never suspected calculi, since he had none of the symptoms of the same. Urine analysis showed acid urine, but no evidence

of tubercle bacilli. The expressed contents of the prostate and seminal vesicles, likewise, failed to show tubercle bacilli, but a few gonococci were found in the prostatic material. At this time I did not catheterize the left ureter, reserving this until later, but decided to treat the urethra, prostate and vesicles. Briefly, this consisted in dilatation of the strictures with Kolmann's Anterior and Guyon's Posterior Dilator every five days, and daily intravesical irrigation of a one to four thousand solution of permanganate of potassium. Prostatic and vesicular massage was also employed every five days. The urine cleared and many of his symptoms disappeared. On December 20th he was compelled to stop treatment by reason of a return of his pulmonary trouble, tubercle bacilli being found in his sputum. Accordingly, he left for Saranac Lake, where his physician gave him occasional prostatic and vesicular massage, as well as urethral soundings and injections. His urinary condition remained improved until April, when he again returned to me, the pulmonary trouble in the meantime having been distinctly improved. I then cystoscoped him. The condition of the meatus of the left ureter (it was everted, bulging, tumified, and surrounded with a zone of inflammation), the urinary spurt being quite irregular, compelled me to catheterize it, with a view of examining the urine for tubercle bacilli. The urethral, prostatic and vesicular symptoms were distinctly improved. The urine at this time was acid and less opaque, and did not present any of the gross characteristics of advanced or beginning tuberculosis.

The catheter easily glided into the left ureter, and met with no obstruction until about one inch above the orifice of the ureter, when it became distinctly bowed. Here it was a question to differentiate between ureterial stricture and foreign body. The latter was deemed more probable, not only because of the bowing of the catheter, but also because renal calculi in their descent to the bladder are prone to be arrested at three points in their course: (1) Two inches from the pelvis of the kidney, as the ureter bends forward over the psoas muscle; (2) at the brim of the pelvis, where it dips down over the bifurcation of the common iliac artery; and (3) close to the vesical orifice of the ureter. Failing to pass this catheter, I passed a smaller one into the pelvis of the kidney and collected one-half ounce of urine, which was examined and injected into guinea pigs. The result as to tubercle bacilli was nega-

tive (the urine, however, did show blood corpuscles, epithelial cells from the renal pelvis, tubules and ureter, pus cells and urinary salts).

I then irrigated the pelvis of the kidney with a one to ten-thousand solution of nitrate of silver, in order to avoid infection.

The patient afterwards remained in my waiting room for an hour and then went to his home. Three hours afterwards I was summoned and saw him with his physician in the agony of a kidney colic. He was attacked with it on the train. He remained in bed four days, during which time he had several similar attacks daily, the urine then becoming scanty and purulent. The desire to urinate was almost constant. He was instructed to void urine through cheese cloth with a view of detecting sandy deposits. Large threads were passed streaked with blood. The temperature, at first slightly elevated, became normal under treatment. With hot baths, liquid diet, free purgation, urotropin, plenty of water and sufficient morphia to control pain, the attack subsided, and only frequency of urination remained. There remained, however, some tenderness over the ureter, as well as in the loin.

Ten days later I decided to again catheterize the ureter, to determine the presence of stone, either of the ureter or kidney. I decided to do it in the hospital, in the event of needing any operative interference.

Bierhoff's *Pelvic Distention Test for the detection of stone, either of the kidney or ureter, was employed. This test is as follows: A catheter is inserted into the ureter of the suspected side, and passed up until its eye lies within the pelvic orifice. (It is necessary to employ as large a catheter as will comfortably enter the ureteral orifice). Having assured ourselves through the nature of the flow of the urine, that the eye of the catheter lies within the renal pelvis, we begin to distend the pelvis by injecting sterilized boracic acid solution, up to such a point that the patient complains of pain in the renal region. This quantity usually amounts to about 30 c. c. The fluid is now allowed to flow off, and the manœuvre is repeated until in all about 250 or 300 c. c. have been employed. In the presence of a calculus the manœuvre is followed in twenty-four hours by a distinct hematuria, at times so pronounced as to be clearly visible to the naked eye. The urine should not, however, be examined for

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the presence of blood until twelve to twenty-four hours have elapsed, so that the mild bleeding resulting from the unavoidable, slight traumatism by the catheter shall have a chance to cease.

Blood found in the urine after this test has invariably revealed to me the presence of a renal calculus, even where the X-ray had given a negative result in the hands of experts, and in no case in which a negative result was obtained by means of the pelvic distention test did either the X-ray or an operation reveal the presence of a stone.

The hematuria which results from the pelvic distention test, in the presence of calculus, is due to the dislodgement and movement of the calculus by the stream of fluid, and, as a result of this dislodgement, blood results from traumatism of the pelvic membrane.

The test this time was negative. Ten days later I repeated this, also with negative results, and, ten days after that, I cystoscoped him and found that the meatus of the left ureter spurted quite normally; the congestion, too, had largely disappeared. Accordingly, I inferred that he had passed a small calculus, which had been impacted low down in the ureter, about one inch above the vesical outlet, and that most of his urinary symptoms were due to this impaction, and that passing the catheter into the pelvis of the kidney so dilated the ureter as to cause the escape of the stone. Certainly he became progressively better since this treatment. His urinary and general symptoms improved.

I believe that the patient passed several calculi from the ureter, because:

1. The symptoms immediately after catheterization suggested the presence of stone low down in the ureter.
2. The urinary findings of the catheterized specimen revealed pus, epithelium from the renal pelvis, and urinary salts.
3. Because the urine voided through cheese cloth showed some sandy deposits.
4. Because a similar train of symptoms failed to recur after two more attempts at ureteral catheterization.
5. Because the examining cystoscope showed the left ureteral meatus to be normal at the last treatment.
6. Because of distinct improvement in urinary symptoms.

Assuredly this case is an interesting one, not alone because of the urinary symptoms, but also on account of the complexity

of the uro-genital symptoms as well as the pulmonary ones. That I was perfectly justified in adopting such measures for differentiation and treatment is proven by the result. That I would have been justified in any event is apparent when one recognizes how closely the symptoms simulated both stone of the kidney and tuberculosis of that organ. Indeed, in reviewing this case, it is not to be marveled at that I was very much in doubt, because uro-genital tuberculosis not infrequently results from gonorrhœa and because kidney stone and tuberculosis may (and frequently do) co-exist.

Stone in the kidney is more apt to be confused with tuberculosis of that organ than with any other renal disease. In stone there may be the presence of gout or lithemia in the individual, while in that of tuberculosis there may be a tubercular history in the patient or his family. Tuberculosis of the kidney usually comes on more rapidly and the patient is more cachectic. The hematuria and the frequency of urination often takes place at night, as well as by day, while the pain is not so acute, and neither the pain nor bleeding is much influenced by exercise. In renal tuberculosis there may also be an associated involvement of the genito-urinary tract. Again, my failure to diagnose the presence of stone before the employment of the pelvic distention test may be pardoned, since it is a well recognized fact that to discover the presence of calculus of the kidney or ureter is by no means an easy task.

Kidney stone may remain quiescent, giving no symptoms for years, or, contrarily, give rise to excruciating agony at any time, the attack resembling that of gall stones or appendicitis; or pyelitis may exist, either mild or showing blood and pus; or hematuria, either gross or microscopic, may exist; or calculus anuria may arise, especially when the ureter is impacted with a stone (such as occurred for a short time in the case just related). Consequently, in order to arrive at a diagnosis of kidney stone, great weight must be laid upon the clinical evidences present, namely:

1. The character of the pain, the associated urinary symptoms and the tenderness over the kidney and ureter.
2. Cystoscopic examination, with a possible catheterization of the ureters, with a view of determining by means of acknowledged tests the condition of either kidney.
3. Particular stress must be laid upon the use of Brierhoff's Pelvic Distention Test.

I infinitely prefer the latter to that of Kelly and Cabot, who employ wax-tipped bougies to determine the presence of a stone. My experience coincides with Ayers, Brierhoff and others who fail to find scratches even where stone has been present, as proven by their methods, such as the Pelvic Distention Method; and exhaustive X-ray examinations must be made in order to determine the presence of stone in the kidney or ureter. I regret that my patient declined an X-ray examination, claiming that his improvement obviated the necessity. Much doubt, however, exists as to the efficacy of the X-ray in the detection of stone in the kidney, and particularly where the stone lies impacted in the ureter.

Leonard, it is true, regards the negative finding equally as reliable as the positive, provided negatives of good quality are found, and points out the fact that plates, to be reliable, must be of such a quality that shadows of objects less dense than the least dense calculus must be shown upon the plate. He has also shown that nearly one-half of all calculi occur in the ureter. However, he admits that tuberculosis, hypernephroma, cystic kidney and tumors may give rise to symptoms not to be differentiated clinically from the picture of stone in the kidney. Again, Garceau* says that it should not be forgotten that both tuberculosis and certain tumors of the kidney will give a shadow which may be mistaken for stone and declares that if the X-ray be valuable it should be the rule to photograph not only the kidney, but also the whole course of the ureter as well.

In conclusion, let me say that while lack of space and time prevents me from dilating more fully upon the various diagnostic methods which must be employed for the detection of stone in the kidney and ureter, yet I am firmly of the opinion (and in this I have the weighty endorsement of Brierhoff, in *The American Journal of Urology*, March, 1906) that ureteral catheterization, together with the pelvic distention and subsequent urinary analysis, will do more to decide the presence of stone and to differentiate it from other conditions of the kidney and ureter (notably tuberculosis, as was shown in this case) than any one other method; and in this I have the endorsement of Heitzmann, Caspar, Nitze and others almost equally eminent.

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EDITORIAL

THE RELATION OF THE HOMŒOPATHIC PROFESSION TO SOME GENERAL MEDICAL PROBLEMS.

It is generally recognized that every individual physician is under obligation to perform certain duties to the members of the community in which he resides, and his professional success and the esteem in which he is held by the people with whom he comes in contact depends upon his ability to properly perform these duties and to contribute to the welfare of and progress of the community of which he is a part. We must remember that the same facts are true as regards organizations of men, and the estimate which the public puts upon the homœopathic branch of the medical profession as an organized body will be based upon the willingness and the ability of that body to aid in the solution of problems relating to the common good. The members of the medical profession have been taking an especially active part during the last year in efforts to enlighten the people in methods of preventing the spread of disease and of protecting themselves against fraud. We have only to mention, as examples of this work, the crusade against tuberculosis, the efforts to bring about an intelligent opinion as regards venereal diseases and the attacks upon quacks and nostrum-venders. The American Institute of Homœopathy, as the official representative of the homœopathic physicians of this country, should not be indifferent to these questions, which are of such vital importance to the welfare of the nation, but should, by both word and action, exert every effort to aid in the exposition of fraud and to promote the public health.

The patent-medicine fraud is so bare-faced and so ubiquitous that we need not take the time to describe the methods employed by the manufacturers of these products to deceive the public and to reap the golden harvest. So gullible is the average layman in this respect that it is sometimes hard to sympathize with him when he has fallen a victim to the tricks of the nostrum-maker. There can be no doubt, however, in the mind of every physician but that the widespread and indis-

criminate use of drugs in the form of patent-medicines is one of the greatest curses of our country and a serious menace to the public health. Physicians can and are doing a great deal to better this state of affairs. The thing the quack fears most is the truth, and when the facts regarding the composition and methods of sale of these preparations are made clear to the public the incomes of the nostrum-makers will be greatly diminished. A method which the homœopathic practitioner can recommend in many instances to replace the use of dangerous and nauseating nostrums is to advise his patients to keep on hand a small medicine-case of homœopathic remedies for use in minor ailments.

We believe that the American Institute of Homœopathy should not only pass resolutions setting forth the views of homœopathic physicians in regard to these preparations, but that they should also appoint a committee to investigate their composition and their effects, and to co-operate with the official representatives of other medical organizations in all legitimate efforts to expose frauds and protect the sick from deception.

Probably no medical problem has attracted more attention among the profession or among the laity during the last two years than the control of tuberculosis. The crusade that has been carried on against this disease has been most carefully and scientifically conducted, and the results that have been accomplished have been little short of marvelous. The problem is a very complex one, and, despite all that has been done, there is still much more to be undertaken. Alcoholism, unsanitary dwellings, and lack of air and light are the most potent factors in propagating the disease. It can readily be seen that to eliminate these factors means long years of self-sacrificing work and the revolution of many of the now existing social conditions. This work will devolve mainly on the members of the medical profession, and let it be said to their honor that many physicians have already responded nobly to the demand for workers in this field and have accomplished acts that will be more potent for the common good than many of the heroic deeds of military heroes or the diplomatic victories of honored statesmen.

We must admit, with regret, that the vast majority of this work has been done by members of the allopathic school of medicine. They have been the leaders in the contest; they are the ones who are meeting the needs of the people. Whatever

may have been done here and there by individual members of the homœopathic school, it must be conceded that as a group of medical men our attitude has been that of spectators rather than as workers. It is not that we have not the ability nor that we lack the willingness to do as much effective work in conquering this scourge as any other body of men. It is simply that we have failed to recognize our full duty in this matter, and it is time that homœopathic medical organizations everywhere should take an active part in establishing sanatoria, in giving courses of popular lectures, and participate in every effort to prevent the progress of this disease, which is so destructive to the life and happiness of humanity.

Of course, we can avoid this responsibility, but we should not be surprised if the public gives honor to whom honor is due, and if the homœopathic profession loses its place in the esteem of the public because of its indifference to the demands of the times it is not necessary to place the blame for our decadence on a lack of study of the *Organon* or the *Materia Medica Pura*. We cannot shift the blame in that manner. It is our duty to meet the needs of our day and generation—if we fail to do that we cannot succeed either as individuals or as a school of medicine.

Closely related to the tuberculosis problem is the movement which has recently been organized against the venereal plague. This has been appropriately named the "great black plague." While they do not have the extensive mortality of tuberculosis, the venereal diseases are probably a more potent source of misery in the social body. The stronghold of venereal diseases is, and has been for centuries, *ignorance*, fostered by a false sense of modesty that has prevented the exposition of the truth. The importance of the sexual instinct, which alone is responsible for the perpetuation of our race, and the necessity of preserving the sexual organs from the baneful influence of venereal diseases by the avoidance of promiscuous and illegitimate intercourse, should be made clear to the young of both sexes. As Lewis, of Chicago recently said in a paper before the American Medical Association, "the truth must be taught regarding ovulation, menstruation and conception. These subjects are among the most important a girl can know. I believe in teaching the boy regarding the sexual instinct, the possibility of continence, the dignity of virility, and his duty as a man worthy of the name toward woman. I believe in the advocacy of decency and the inculca-

tion of principles of honor. This cannot be done by keeping silent. It is only possible by speaking out plainly, by telling the truth."

The personal influence and advice of individual physicians is probably the most effective means of giving the public a proper understanding of diseases of this character, but much can be done in an educational way through organized bodies of medical men. Homœopathic physicians are just as capable of doing their share in the effort to suppress venereal diseases as any other body of physicians and homœopathic medical societies, both national and local, should not fail to appoint committees to take up the work in an active way and demonstrate to the profession and to the public at large that we are neither dead nor sleeping.

Another new problem, of a purely medical character, which furnishes a fruitful field of work on the part of homœopathic physicians, is the study of tropical diseases. The intimate relations which have been established between this country and Cuba, Porto Rico and the Philippines, as the result of the Spanish-American war, has greatly added to our interest in and to our opportunities for the study of these diseases. The importance of a correct understanding of the etiology and the methods of preventing and treating these diseases is illustrated by the fact that one of the most serious questions in the construction of the Panama Canal is how to prevent the breaking out of destructive epidemics of disease among the laborers.

Much attention has already been paid to the pathology of these disorders by various investigators, but the problem of how they are to be effectually treated is as yet almost untouched. It is in this direction that homœopathic investigators should direct their efforts, and, if possible, imitate the example of Hahnemann in the cholera epidemics of his day by defining the group of remedial agents that are adapted for the amelioration and cure of these disorders.

In a cursory way we have pointed out a few of the problems which the world expects the members of the homœopathic profession to aid in solving. We can avoid them if we wish, but not without injury to ourselves and injustice to others. If we would see homœopathy honored among men and our principles given the recognition they deserve, let us work rather than talk, and let us make every effort to demonstrate the practical utility of our methods and principles in meeting the needs of humanity.

THE INSTITUTE JOURNAL.

THE committee appointed to consider the advisability of changing the form of publishing the Institute proceedings from book to journal form has prepared a report advocating the change. While we believe that the report of the committee, as presented, is open to very severe criticism as to details, we are of the opinion that the publication of the Institute transactions in journal form is a step in the right direction, and should carry with the Institute members. Bound volumes of transactions are not popular, and are unhandy to readers. We have as examples of the wisdom of the Institute journal the success attained by the *Journal of the American Medical Association*, and by the official organs of various old school State Societies.

The fault to be found with the committee's report lies mainly in their estimates and proposed organization. The amounts named for expenses of publication and for receipts are much below the correct figures. One estimate, that of the business department, strikes us as ridiculous, as a salary is named far in excess of the estimated receipts from that department of the journal. It will be much better for the journal management to engage a business manager on a commission instead of a salary basis, giving the editorial office a special appropriation for stenographer or private secretary.

There are two very serious obstacles to starting the journal in January, as suggested by the committee. The proceedings of the coming convention are the property of the World's Congress and not of the American Institute of Homœopathy. The inference is obvious. The American Institute has no control over the papers and discussions.

The other objection is found in the fact that many of the essayists have promised duplicate copies of their papers to various journals in accordance with a privilege granted them by Institute usage or by-laws, which privilege has not been rescinded. The best of the papers in all likelihood will be published in various journals between now and January, when the new journal is proposed to be started.

The plan of procedure which we would suggest is the following:

1. Vote to start the journal in July, 1907.
2. Elect an editor, giving him instructions to perfect his or-

ganization. Allow him a special sum in addition to his salary for a first-class stenographer or secretary. Let his contract be for one year, with an option on his services for five more years, if he proves satisfactory to the majority of the members.

3. Provide for the election or appointment of journal trustees. This will demand amendments to the by-laws, and can not take effect until June, 1907. But this is not a serious obstacle, as the trustees will not have any important work until the Institute journal be started. In the meantime a committee can be appointed to act *ad interim* with duties of trustees.

4. Incorporate the Institute.

5. Direct the Journal Committee to select a business man to take charge of the journal's advertising, his pay to be on a commission basis.

6. Pass a resolution which shall restrict the publication of the papers of the Institute and subsidiary societies to the Institute's Journal.

It has been brought to the attention of the editor-in-chief of THE HAHNEMANNIAN MONTHLY that certain evil-minded individuals are circulating the report that this journal has advocated the proposed change in the form of publication of the Institute's transactions in order that he may secure the lucrative (?) position of Institute editor. If such a falsehood had no other effect than to reflect upon him personally he would have paid no attention to it; but inasmuch as it is calculated to injure the good name of THE HAHNEMANNIAN, and possibly block the march of progress, he takes this opportunity of saying once for all that no inducements can be offered by reason of which he will take up new editorial duties. He feels honored, of course, by the compliment paid him by some friends who in all sincerity have named him for the honorable position under discussion, and thanks them sincerely for their good wishes. But he is in no sense a candidate, and will not permit himself to be nominated. All editorial remarks advocating the Institute journal have been founded on the honest conviction that the Institute Journal is in accordance with the march of progress. THE HAHNEMANNIAN, its editors, its owners and its officers, while remaining steadfast in the future as in the past to their first love, THE HAHNEMANNIAN MONTHLY, are hereby pledged to exert every effort to encourage the new journal and wish it success.

LEWIS HENRY WILLARD, M. D.

DR. Lewis Henry Willard died on Monday, July 30th, 1906, at his summer home, Beaumaris, Ontario, Canada, after an illness of but two days' duration. He had been away from work not quite two weeks, and although he had left home somewhat tired out and needing rest, the short time had served to bring back to him his zest for life's activities. On Saturday he was in his usual good health, full of the enjoyment of outdoor life. He went fishing in Muskoka Lake twice that day, and after each return ate very heartily. It may be that he over-exerted himself in the heat of the afternoon, as he was compelled to row a good deal coming home, owing to the incompetency of his boatman. That night he was attacked by a sort of dysentery with much tenesmus and pain. Sunday morning his family became alarmed about him and a physician was procured from the distant town of Bracebridge, who pronounced his condition serious. There was no vomiting, but the pulse was weak and rapid, being at that time about 140, and there was still the tenesmus with little or no result. A consultation was requested and another physician called from an equally distant point, but before the consultant arrived Dr. Willard's fate was in the hands of a Higher Power. He passed quietly away at nine o'clock the following morning after a brief period of unconsciousness. Whether death resulted from intestinal intussusception, faecal obstruction or from acute indigestion was not definitely determined.

Dr. Willard's name was, with one exception, probably better known to the homœopathic profession at large than that of any of his confreres in Western Pennsylvania. His interests and activities were so varied and widespread and his energy so unflagging. Born in West Philadelphia September 25th, 1839, his family removed to Hatboro, Pa., during his youth, where his early life was spent on a farm that remains in possession of the family to the present day. At the time of the beginning of the Civil War he was a student in the Medical Department of the University of Pennsylvania, but before graduation he left and enlisted as assistant surgeon in the navy, serving until the close of the Rebellion. After leaving the navy he attended the Homœopathic Medical College of Pennsylvania, the predecessor of the present Hahnemann Medical College of Philadelphia, and was graduated in 1866.

In 1867 Dr. Willard came to Pittsburgh and entered the Homœopathic Hospital as a resident. The hospital was opened this year and he was its first resident. Since that time, thirty-nine years ago, he has been a faithful, honored member of its staff, serving in many useful capacities until the day of his death. He was a member of the executive committee, of the medical board, being the oldest member of the general surgical staff; dean of the Pittsburgh Training School for Nurses, connected with the hospital, and consulting physician to the dispensary. The history of the hospital from its beginning is inseparable from Dr. Willard's name, and all through these intervening years its interests, next to family ties, lay nearest his heart. He was not only constant and faithful in attendance; his zeal was untiring, his energy unflagging, his efforts to promote its welfare absolutely without thought of self. Upon the day following his death Dr. J. H. McClelland said at the special meeting of the Medical Board: "No one man, not eight men, can fill his place in the hospital." Through all these years he was always to be had when needed, and whether upon duty or not was ever prompt to respond in cases of emergency—and so was he ready and willing in all the other fields of activity in his wonderfully active life.

Besides his hospital connections and the duties of a large private practice, Dr. Willard found time to devote himself to other public interests. He was president of the State Board of Medical Examiners, a member of the Commission to erect a homœopathic hospital at Allentown, an active member of the American Institute of Homœopathy, the State and County Medical Societies, member of the Grand Army of the Republic, the Loyal Legion and the Three Year Veterans.

To describe the salient points of Dr. Willard's character; they were essentially promptness of action, fidelity to purpose, loyalty to friends and, above all, sincerity. An idea once conceived was carried to accomplishment with promptness and singleness of purpose. He had many friends and no enemies that ever discovered themselves. He was a good friend, sparing himself no inconvenience or sacrifice of time and energy to help others in sickness or trouble. As a father he was devoted to and beloved by his children; as a husband he was a loving and constant companion during all the thirty-six years of his marital life.

In his professional relations he was an example of a type

fast disappearing in these days of differentiation in medical practice. Although a surgeon of standing, he continued in general practice to the end, and his relations with his patients were intimate and delightful. Many a family in Pittsburgh and Allegheny whom he attended long and faithfully are mourning in spirit to-day. Also it may be said of him, as of many others of the old type of family physician, but in this case with peculiar emphasis, that he left behind him many poor whom for years he had served cheerfully without thought of reward, whose grief at his taking away is twofold.

Toward his medical brethren his attitude was always what it should be. Especially toward the young men starting in the profession was he helpful with advice and encouragement. He was a "square" man in a man's sense of the word. Never by spoken word, by innuendo or by suggestive gesture did he try to lessen the confidence of a patient in one of his younger brethren.

Dr. Willard never through life took time to rest. His energy, whether at work or at play during his well-earned vacations, was unrelenting. His death, therefore, was peculiarly fitting. Two days before he had been out enjoying his favorite pastime in that beautiful lake country. Even the day immediately preceding, although very sick, he was not constantly in bed. And on that Monday morning, surrounded by his loved ones, his spirit passed quietly and unconsciously out into the unknown. No lingering illness, no burdening of his beloved, so distressing to one of his temperament, but a quick transition. If he had ever formed a wish concerning the end, it must have been fulfilled. As he went through life doing at once the things to be done, so was the final act accomplished. He went away leaving behind many loving, sorrowing friends.

S. M. RHINEHART, M. D.

THE ACTION OF THE RONTGEN RAYS UPON THE OVARIES IN PREGNANCY.—Fellner and Neumann in repeating the experiments of Halberstadt, have found that the Rontgen rays directed upon the ovary of recently impregnated rabbits induced abortion, or from shorter periods of application prolongation of pregnancy, in addition to a degeneration of the ovaries and retarded ovulation, and they also believe they interfere with the internal secretion of the ovaries. They are inclined to ascribe a similar effect in the human being, and think the rays might be used therapeutically in osteomalacia and the hemorrhage from myoma.—*Zentralbl. f. Gyn.* 1906, 630.

GLEANINGS

DISLOCATION OF THE OUTER END OF THE CLAVICLE. Scudder has treated two of these cases by suture when he found it to be impossible to reduce and hold them in place by retentive dressings. One result was perfect, but the other was poor.

He believes the following lesions occur in these dislocations: 1. That the acromio-clavicular ligaments are torn in all cases. 2. That the conoid ligament is sometimes torn in incomplete dislocations. 3. That the conoid ligament is always torn in complete cases. 4. That the conoid and trapezoid ligaments are usually torn in complete cases.

The indications for operation are irreducibility and a failure to maintain reduction. The dislocation is irreducible because of the interposition of the torn capsule or the lacerated trapezus muscle. The maintenance of reduction is impossible, because of the rupture of the acromio-clavicular ligaments.

At operation, therefore, the indications are to remove any interposed parts and so to suture the torn ligaments as to restore the relation of the parts to their normal condition. Keeping the patient on his back will assist very materially in the proper healing of the parts.

Cousins, in discussing this paper, related a case of complete dislocation of the clavicle which could not be held in place by strapping or bandages. The patient was then placed in a prone position, with the head of the bed elevated.

Three sandbags were used to hold the bone in position; one below the elbow to raise it, one over the acromion to hold the outer end of the clavicle in place, and the third, about a foot long, was placed transversely and retained the inner end of the clavicle in position.—*Journal Amer. Med. Assoc.*, July 7, 1906.

J. D. ELLIOTT, M. D.

THE RADICAL CURE OF FEMORAL HERNIA. Aslett Baldwin describes an operation which he has used with perfect success in twenty cases—an incision is made over the saphenous opening and the sac is isolated. A hernial director is now passed through the crural canal in front of the sac and when its point is behind Poupart's ligament it is moved laterally to strip the peritoneum from the transversalis fascia. The point of the director is now pushed further upward and tilted forward to make the external oblique muscle project about one-half inch above Poupart's ligament. A small transverse opening is made through the aponeurosis and a small pair of forceps is passed through it down behind Poupart's ligament to the saphenous opening where they grasp the fundus of the sac.

The forceps are now withdrawn, pulling the sac out through the opening in the aponeurosis, where it is ligated as high as possible. Thus no pouch is left to invite recurrence. A suture is now passed through the fundus of

the sac and tied in the middle, leaving both ends long and free. One end is now threaded and passed backward and forward through the sac several times, beginning at the fundus and ending at the neck, as described by Macewen for puckering the sac. The needle is now passed through the hole above Poupart's ligament, through the neck of the sac, down to the transverse ramus of the pubes, then by a turn of the wrist is made to slide forwards across the pubic bone, as close as possible, then to pierce the pectineus muscle and finally be brought out through the saphenous opening.

By drawing on the thread and tucking the sac back through the opening in the external oblique, the sac comes to rest in a puckered-up condition behind the transversalis fascia and at the top of the crural canal, which it effectually roofs in. By tying up two ends of the thread, one of which projects through the upper hole and the other through saphenous opening, the sac is held in position and the pectineus muscle is fixed to Poupart's ligament, so obliterating the crural canal. If necessary a second suture may be put in, but nearer the pubic spine. The opening above Poupart's ligament is closed and the skin sutured.

Thus there are three distinct checks against the recurrence of the hernia: (1) The sac is ligated higher up than is possible by the ordinary method and leaves no peritoneal pouch; (2) the sac is used as a buffer or roof above the crural canal; and (3) Poupart's ligament is approximated to the pectineus muscle and obliterates the crural canal.—*The Lancet*, July 21, 1906.

J. D. ELLIOTT, M. D.

CAPILLARITY IN INTESTINAL SUTURE. Capillarity, or the continuous flow of infective material from the lumen of the gut along the suture, has always been greatly feared. This is shown by the attempts that have been made to include only part of the intestinal wall in the bite of the stitch in the various methods of intestinal suturing. Connell has made a series of experiments to find out how much danger really exists from this source, and how the different suture materials are affected.

He dipped twisted silk, linen, braided silk, and Pagenstecher thread in a saturated aqueous solution of methylene blue and found the capillarity to be greatest in the order mentioned above. Catgut had practically no such action.

When the sutures were wet the capillarity was markedly increased, and it was much greater when the thread was lax than when tense, and also in a coarse thread. When the threads were knotted, the capillary action was considerably lessened.

Sutures were placed through the serous and muscular coats of a dog's intestine and a freshly removed human appendix, but no difference was found between these and the experiments already made.

A drop of the methylene blue was placed in some intestinal contents, diffusion between the two liquids being slow and limited. When twisted silk was laid in this so that the center was in the colored fluid, the power of capillarity was lost, for the blue color did not travel along the suture material. In a control, no intestinal contents being used, the capillarity was very marked.

A number of sutures were then placed in the intestines of anæsthetized animals, lying in the lumen of the gut, for an inch or more and were then

brought out through the intestinal wall. The intestine was filled with methylene blue, but the portions of the suture material on the outside remained uncolored, although the part inside was stained a deep blue.

Two experiments were finally made to discover if any difference in capillarity between the bacteria of the intestinal tract and the colored solution existed.

Under strict aseptic precautions a threaded needle was passed into the large intestine and, with the aid of a pair of forceps introduced into the rectum was drawn down for several inches. The abdomen was closed and the animal kept anæsthetized for one hour. The wound was reopened and the thread was cut off close to the gut dropped into a tube of culture media. The result was negative. As a control, after these steps had been taken, a suture was passed into the lumen and out again. A piece of the suture material which had passed through the lumen was dropped into a tube of similar culture media. The result was positive. The same result was obtained when the animal was kept under the anæsthetic for two hours.

From the preceding it would seem that the danger of peritoneal infection by capillarity in intestinal suturing has been greatly exaggerated and that it has little substantial basis. This is also emphasized by recent clinical experience in which intentional or unintentional perforating sutures have been used with practically uniform success.—*Journal Amer. Med. Assoc.*, August 11, 1906.

J. D. ELLIOTT, M. D.

REPORT OF AN EPITHELIAL LINED FISTULA IN ANO IN AN INFANT. Martin W. Ware reports the case of an infant, aged three months, who was brought to him for a faecal fistula which showed no signs of a previous inflammation. It was excised, and the membrane was found to be lined with several layers of epithelial cells. The external were stratified, the deeper squamous, but the papillæ were poorly developed. No infiltration was seen in the underlying cellular tissue. Most text-books attribute these fistula in infants to the same causes as those in adults. But this one was evidently of a congenital origin.—*American Journ. of the Medical Sciences*, July, 1906.

J. D. ELLIOTT, M. D.

OCULAR INJURIES.—Injuries to the eyelids and other ocular appendages seldom affect vision, infection rarely follows, wounds heal rapidly, and are to be treated simply in accordance with the ordinary rules of surgery. This treatment may be carried out by any intelligent practitioner. Superficial injuries to the cornea are more important. Infection takes place, and then there is danger of a suppurative process, which may extend throughout the cornea, or even involve the whole eyeball. Remove foreign bodies and use applications to prevent infection.

Penetrating wounds of the eyeball should always be approached with more or less concern. If not already infected at the time of the injury, they easily become infected afterward. Moreover, a foreign body may have been driven into the eye, and not only carries infection with it, but itself becomes, with rare exceptions, a certain cause of destructive inflammation.

In every punctured wound of the eyeball by a small, unseen object, there should always be a suspicion of the introduction of a foreign body. The

diagnosis is often more difficult, and requires special appliances and experience. The removal of a foreign body from the interior of the eye is almost imperative to its salvation. Here, too special equipment and special skill are demanded. Infection by whatever means it may be introduced, is the agent which destroys the injured eye, both by suppuration and by non-suppurative uveitis.

In non-suppurative traumatic uveitis the infection seems to be of a specific kind and is transmissible to the uninjured eye, producing there a sympathetic uveitis, which is also destructive in its course. Sympathetic inflammation does not develop until at least two weeks after the injury of the first eye. In the absence of a foreign body, or after its removal the immediate treatment of a perforating wound consists in sterilizing the eye and its surroundings, freeing the wound of all incarcerated tissues, and closing it as perfectly as possible, or touching the opening with pure carbolic acid. Subsequently, sterilization should be kept up as effectually as the circumstances will permit.

Infection should be combatted by intraocular disinfectants, and rendered dormant by the persistent and methodical application of cold over the eye. An eye that is hopelessly lost at the time of the injury should at once be excised. When an eye is affected with active traumatic uveitis it should be enucleated within two weeks from the time of the injury, unless the eye has or may be given useful vision. In wounds of the eyeball of all varieties, delay is dangerous, and if there is the slightest possibility of a foreign body being lodged within the eye, or if infective processes begin, the dangers to sight are so great that the services of a specialist should always be secured, if possible.—A. A. Hubbell. *The Homeopath. Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M. D.

PRIMROSE'S NEW OPERATION FOR PANNUS. This operation consists in causing an extravasation of blood into the subconjunctival tissue around the cornea. This, by its mechanical pressure and by acting as an irritant foreign body setting up a localized inflammation, causes the obliteration of the vessels which vascularize the cornea. The only instrument required is a small, sharp-pointed knife—a Beer's cataract knife does very well for the purpose. The point of the knife is passed through the conjunctiva at a distance of two or three millimetres from the cornea and made to puncture one of the larger blood vessels. The knife is then withdrawn. The conjunctival wound should be as small as possible, and made obliquely by holding the knife at an acute angle with that part of the surface of the eyeball which is being operated on. In this way there is no external hemorrhage, but bleeding takes place into the subconjunctival tissues and is arrested automatically by the pressure of the extravasated blood on the blood vessel walls. In like manner, many of the smaller vessels in the vicinity are mechanically closed. The mechanical action is increased by the formation of a coagulum, the fibrinous part of which shrinks and makes the whole mass smaller. By the time the blood clot has disappeared, the blood vessels in the cornea affected by the operation have shriveled up and the cornea has regained much of its transparency.

The whole pannus may be treated in this way at one time, or the opera-

tion may be repeated from time to time, only a part of the pannus being treated each time. The latter is always advisable when the pannus is marked, as the inflammatory reaction is sometimes very severe and accompanied by a good deal of pain. Although the structures in the anterior part of the eyeball are all more or less affected by the inflammation, this is easily controlled and subsides in a few days with the application of suitable remedies.—*The Homeopath. Eye, Ear and Th. Journal.*

WILLIAM SPENCER, M. D.

AN ANALYSIS OF FORTY CASES OF MENINGITIS IN INFANCY.—John Lovett Morse reports these cases, there being an equal number each of tuberculous and cerebrospinal meningitis in the series. In each case the diagnosis was verified either by lumbar puncture or autopsy. A marked predominance of mononuclear cells in the cerebrospinal fluid was considered diagnostic of the tubercular form, and of the polynuclear cells of the cerebrospinal form. The meningococcus was found in all but three of the cerebrospinal cases.

After presenting an analysis of the symptoms as they could be classified from the records of his cases Morse calls attention to the following points which are at variance with the usual text-book description of meningitis:

The usual rapidity of the pulse and respiration; the relative infrequency of slow pulse and its inconstancy in this series; the frequency of vomiting both early and late and the infrequency of explosive vomiting; the infrequency of constipation; the infrequency of manifestations of pain; the relative infrequency of convulsions and of Kernig's sign; the variability of the knee-jerk; the absence of ankle-clonus; the absence of bulging or even of depression of the fontanel during the course of the disease in certain cases; the almost constant absence of retraction of the abdominal muscles; the frequent absence of increase in the spinal pressure as shown by lumbar puncture.

Comparative symptomatology of tubercular and cerebrospinal meningitis: Four of the tubercular cases were of sudden onset, while only four of the cerebrospinal cases were of the typical sudden onset. The duration of the tubercular cases was as a rule shorter. On the whole the symptoms were quite similar in both forms, but the neck symptoms, paralyzes, spasm of the extremities and Kernig's sign were more marked and constant in the cerebrospinal form.

As an aid in differential diagnosis the history of exposure to tuberculosis or a tuberculous family history proved itself of value in most of the tuberculous cases.—*Jour. Amer. Med. Ass.*, June 23, 1906.

C. SIGMUND RAUE, M. D.

THE INFLUENCE OF THE UTERINE NERVES UPON ATONY OF THE NON-PUERPERAL UTERUS. Fellner, (Franzenbad) thinks that a satisfactory conclusion has not been reached in the current discussion of the causes of uterine atony during curettement, because the influence of the nerves has not been determined. A study of the innervation of the rectum has shown that there are certain nerves whose impulse is motor, for longitudinal fibres and inhibitory for the circular, and vice versa. A similar arrangement

exists for the uterus. In the corpus uteri the so-called *nervus erigens* is the motor nerve for the longitudinal muscular tissue and inhibitory for the circular; and the hypogastric is motor for the circular and inhibitory for the longitudinal fibres. In the cervix the conditions are reversed, so that the *erigens* is motor for the circular fibres and inhibitory for the longitudinal; and the hypogastric is inhibitory for the circular and motor for the longitudinal fibres. The ganglia from which reflex impulses may arise are situated about the fundus and corpus, at the cornua and in the cellular tissue anterior and posterior to the cervix. When the cervix is subjected to mechanical dilatation, two assumptions may be entertained, one being that the irritation from the dilator affects both nerves in a moderate degree. There are reasons, however, for believing that in the cases of moderate loss of uterine tonicity the hypogastric nerve fibres are alone affected, since it is probable that their ganglia are situated low down near the cervix. The motor action of the other nerve remains intact, the tonicity of the longitudinal muscles continues and the walls of the uterus remain thick while the cervix is dilated horizontally. Some experiments have also shown that these nerves are vasomotor, the *erigens* being a vasodilator and the hypogastric a vasoconstrictor. When in the first stage of atony the hypogastric is paralyzed its vasoconstrictor action also ceases and the vessels become filled with blood. The paralysis of the *erigens* first occurs when the curette is used, but increases constantly. The effect of this paralysis is not only that the muscles become more and more relaxed and the curette passes constantly deeper into the uterine cavity, but also that its vasomotor action being suspended the vessels are less filled and then the uterus is felt as a relaxed organ.—*Zentralbl. f. Gyn.* 1906, 742.

THEODORE J. GRAMM, M. D.

THE CAUSE OF ECLAMPSIA AFTER DELIVERY. Liepmann, of Bumm's clinic, says one of the most difficult problems in studying eclampsia is to form some conception of the occurrence of eclampsia in the puerperal period. According to his opinion eclampsia is caused by a toxæma. The toxin is an albuminoid substance and arises in the placenta, probably from defective synthesis of maternal albuminoid substances elaborated by the syncytium. The organism becomes poisoned if not able to neutralize these toxic albuminoids by appropriate anti-substances. We must assume that the poison finds suitable points of attack in the brain, in the kidneys, and also in the liver, and causes most injury in these organs. This theory depending upon a large series of experiments, is simple enough when applied to eclampsia occurring in pregnancy and during labor, but when applied to attacks occurring after delivery it appears to fail, for the point of origin, the placenta, is removed; therefore whence the poison, and why the attacks? In reply, the author regards the matter as follows: He has been able to show that the eclamptic poison is retained in the liver. The liver acts similarly with regressive albuminoid substances from intestinal digestion, and also in the other toxic conditions as in lead poisoning. If then, on the other hand the liver is able to retain, fix and render harmless the poison produced by the placenta, no attack will occur either during or after labor. But if the poison is produced in such large quantities that the liver is only able to deal with a certain amount of it, the remainder will cause attacks of eclampsia.

If in the third place the liver is able to retain a sufficient amount of toxin there will at first be no attacks; but as soon as the organism is injured by means of physis or psychic causes, these previously harmless quantities of toxin may become harmful; and such causes are found in the loss of blood, the mental excitement, and the consumption of maternal albuminoid and protective substances for the purpose of lactation. Such examples are numerous in bacteriology for as is well known, a normal animal may endure minim doses of poison, which become harmful as soon as its vitality is impaired. In brief, therefore, the author believes that in cases of eclampsia after delivery, the liver is able to retain the toxins, but not able to neutralize them, and after delivery these unneutralized substances enter the organism and finding suitable points of attack in the brain or kidneys or both, a typical attack follows with convulsions and albuminuria. The percentages of mortality may possibly verify this view, for Steinberg has found among 340 cases, that during pregnancy, when the production of poison is continuous, the mortality is 32%; during labor when the poison is elaborated up until the time of delivery the mortality is 30%; while after delivery, when the attacks are caused only by the amount of retained toxin, the mortality is 15.9%.

In the treatment the author makes a suggestion of value, namely, in addition to the usual treatment consisting of infusion of salt solution, digitalis, camphor, caffen, &c., to meet well known indications, that they have found the use of artificial respiration of pronounced value in overcoming the dangers of coma with superficial respiration and the rapid, compressible and fluttering pulse. It is used during a half hour, repeated at intervals.—*Zentralbl. f. Gyn.* 1906, 693.

THEODORE J. GRAMM, M. D.

HOW TO HEAR THE FETAL HEART SOUND AT THE MIDDLE OF PREGNANCY.—Schwab (Erlangen) says it sometimes becomes a matter of importance to determine with certainty the presence or absence of pregnancy in the early months. For instance in doubtful cases of mole and when the woman is bleeding the treatment will depend upon the recognition of normal pregnancy. In such a doubtful case in which others repeatedly failed to hear the fetal heart sound, the author was able instantly to determine the existence of normal pregnancy by the following method. Standing to the right of the patient lying upon the table, he placed his right hand just above the border of the pubic bone and by gradually increasing pressure made the hand sink deeply into the pelvis, thus displacing the uterine contents upward. The stethoscope then applied to the most prominent position of the uterus at once detected the sound sought for. Of course a certain amount of caution must be exercised to avoid doing injury.—*Zentralbl. f. Gyn.* 1906, 628.

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY JOHN HUTCHINSON, M. D.

THE FEAR OF BEING BURIED ALIVE AND ITS PREVENTION.—The fear of being buried alive is a spectre that continually haunts certain individuals. Burial of the living is something of the greatest rarity, although in times of epidemics and after a battle such a thing is not impossible. Recently a Marseilles physician has published a method devised by himself for the detection of life if it persists. He proposes as an infallible test the hypodermic injection of a solution of fluorescein. If the blood of the supposed dead person is still circulating the dye is absorbed and the body rapidly turns an intense yellow, while the eyeballs become an emerald green. The test requires only a few moments to apply, and the results are too striking to pass unnoticed. The general adoption of this simple method of deciding between apparent and real death would forever eliminate any possibility of any one ever being buried alive.—*Exchange*.

CONSTIPATION.—(Chas. G. Wilson, M. D., Clarksville, Tenn.) A "drummer" once said his house could well afford to distribute its "Bile Beans" gratuitously among the people because, like most laxatives, their use created the need for more. There was no let up and consequently a permanent customer was made. The first need therefore in the cure of constipation is to stop the use of all laxatives and enemata. Let the bowels alone until there is an inclination for stool, even if it be for a week. If there be the inclination as shown by griping pains or urging in rectum, a small enema of cool water will relieve. If the impaction is at the cecum and tenderness results, use a large hot-water enema—more than two quarts rather than less should be in the colon at one time. This enema should be taken while in a reclining position on bed. Most of the laity think an enema is to be taken while sitting on the closet. Use a bulb syringe, then you know how much resistance is met and exactly how much water you use. With a fountain syringe all is guess work and foolishness. It will require persuasive reasoning or positive demand to make the average patient stop taking something to move bowels every day. It has been inculcated as a religious duty. But he should be required to go to the closet every day at the same hour. . . . —*The Am. Phys.*

WHEN THE HOMŒOPATHIC REMEDY FAILS of materializing, notwithstanding our most strenuous efforts, the following for colds and hoarseness may seem like a providential port in a storm.

Dr. S. P. Johns says: "I will give a remedy for colds and hoarseness, which I have used for thirty-two years, and have never found its equal: Tinct. Jamaica ginger and tinct. capsicum, of each oz. 2.

"Mix and take a teaspoonful in one-half teacupful of hot water before meals and at bedtime. Add plenty of sugar. Try it."

What so tantalizing as a cold or cough which refuses to give way to our most painstaking prescription; and the laity considering it a slight matter are like to treat it slightly and wonder why the physician is unable to cure "the simple thing."—*American Physician*.

[We confess that we are unable to follow this flight of science. Is it homœopathy up-to-date?]

INTERMITTENT FEVER.—(Harvey Farrington, M. D., in *The Medical Advance*.)

Feb. 19, 1902. Mr. Olaf Stolpe. Age 43.

Had chills and fever 3 years ago, brought on by lying on wet ground.

Took quinine and stopped them in two months.

They returned two weeks ago, after he got his feet wet. Paroxysm begins at 4 P. M., with heat, which lasts only four or five minutes. This is immediately followed by shaking chill, ending in sweat; thirst during the chill and sweat.

Chill relieved by drinking water. Headache and general malaise during apyrexia. Appetite poor; nausea after eating.

Chill relieved by drinking: Nux v., bry., rhus, sil.

Chill with perspiration: Nux v., sulph.

Chill better by heat: Caps., eup-per., ign. kali c., nux, rhus.

Thirst during chill: Acon. apis, arn., bry., caps., carb. v., chin. s., cina, eup. perf., ferr., ign, kali c., lach., nat. m., nux. v., op. rhus., sec., sep., sil., sulph., verat.

Irregular paroxysm: Eup. perf., nux. v.

4 P. M.: Apis, nux. v.

Rx. Nux vomica IM (B. & T.)

Never had another paroxysm.

CARBO ANIMALIS.—(Erastus E. Case, M. D., Hartford, Conn.) The symptoms of carbo animalis may perhaps be best understood by contrasting them with those of its near relative, carbo vegetabilis. Their action is so nearly alike that one should not follow the other; they might prove to be inimical.

Carbo animalis applies to a lower state of debility than carbo veg.

Both have offensive ichorous otorrhea, but carbo an. has also swelling over the mastoid process, really periostitis.

Both have abnormal sounds affecting the hearing, but carbo an. has the peculiarity of not being able to tell the direction from which sound comes.

Both have defects of vision: carbo an. is far sighted, and after looking awhile at an object it must be brought nearer to the eye in order to be seen clearly; carbo veg. is short sighted.

Carbo an. diarrhea is painless; carbo veg. painful.

Carbo an. urine is increased in quantity; carbo veg. scanty.

Carbo an. has decreased sexuality; carbo veg. increased.

Carbo an. is better when getting out of bed; carbo veg. generally worse.

Carbo an. is worse from becoming cold, is averse to being uncovered; carbo veg. is better from cold, is inclined to throw off the coverings.

Carbo an. is worse from cold food; carbo veg. worse from warm food.

Carbo an. is thirsty, especially during fever; carbo veg. has thirst only during chill, if at all.

Carbo an. is predominantly worse; carbo veg. better from uncovering; when assuming an erect position; when drawing up diseased limb; when the stomach is empty.

Carbo an. is predominantly better; carbo veg. worse from wrapping up; when stooping; from stretching out diseased limb; when lying; after breakfast; after drinking.

Carbo an. should always be in mind for elderly people with blue cheeks, blue lips, and great debility. It is also suitable for those debilitated by disease, especially by loss of animal fluids. There will be venous plethora, large and blue veins, the skin looks blue. Of course with this condition there is a tendency to gangrene. If the senile form comes on the disposition to keep the part cool will differentiate carbo veg. from carbo an. or arsenicum.

In glandular affections carbo an. is often called for, especially when the glands have a stony hardness. Buboes, opened too soon, with gaping wounds with hard raised edges, indicate carbo an. They may not heal without it.

In cancers there is hardness of the tissues, with venous stasis surrounding them.

In dyspepsia the empty sensation in the stomach is not relieved by taking food, a condition often met with during lactation. With this there is coldness of the stomach internally, not relieved by external heat.

Hemorrhoids with inodorous moisture oozing from the anus. Offensive lochia can be relieved by carbo an. more effectually than by any douche scientific folly has invented. The 200th potency has acted so nicely that I have tried no other for this purpose. In gangrene of the lungs following pneumonia either carbo an. or veg. may be needed, and the differentiation may be difficult:—

The carbo an. cough is hoarse, causing a shaking in the brain as if it were loose; carbo veg. cough spasmodic, voice deep and rough, or aphonia. Carbo an. has a cold sensation in the chest; carbo veg. a burning. Carbo an. has a smothered sensation when falling asleep; carbo veg. has dyspnea from turning in bed, or on falling asleep.

Both remedies have an offensive purulent expectoration; in carbo an. it is green; carbo veg. yellow and profuse.—*N. A. J. H.*

IN INTESTINAL INDIGESTION.—The indicated remedy must correct the condition and the patient will be able to eat articles of food that otherwise disagree.—*Dr. A. H. Schott, in The Clinical Reporter.*

A RECENT WRITER on gastronomics concludes that the American's worst crime, at present, is the predigested pine shaving chopped whiskbroom breakfast food habit.—*Coca Leaf.*

FOR FOUR HUNDRED YEARS physicians in Europe stopped thinking and let Galen think for them. Shall we stop reasoning because Hahnemann thought for so many, a hundred years ago? We best honor his memory and worthily continue the traditions of our departed leader by studying the new physiology, pathology and bacteriology so that we give the homœopathic system its rightful place among the medical sciences.—*George F. Laidlaw.*

[And in the effort to secure "its rightful place" let us keep right on thinking homœopathy too.]

ACUTE MYELITIS ENDING IN RECOVERY.—(Herman B. Allyn, M. D.,) in *The Pennsylvania Medical Journal*. The following report, on which we will make no further comment, suggests the possible effects of diphtheria antitoxin. Dr. Allyn says: The following case is of exceptional interest because the disease is rare, and because the result has been more favorable than one can hope to have in most cases of the same kind.

The patient was a young girl in her teens, of previous robust health and without hereditary taint. She was taken ill June 4 with tonsillitis. The deposit on the tonsils was not characteristic of diphtheria, but in accordance with the writer's practice in all doubtful throat cases, 2000 units of antitoxin were at once given. On the following day there was a general, fairly intense, scarlet rash over the entire body except the legs. The temperature was about 103 degrees and the pulse frequent. The general appearance was that of scarlet fever, but there was no desquamation. I regret that no culture was made from the throat.

The patient improved rapidly, but complete convalescence was delayed by an acute suppuration of the middle ear. There was early in the attack some tenderness over the mastoid, but the discharge was free and the tenderness steadily diminished. By June 20 the ear was almost entirely well. Free irrigations were, however, kept up for about ten days longer. Meantime the child seemed to be well. The appetite was good, she slept well, and gained steadily in strength. She was able to be out of doors but did nothing to induce fatigue, nor was she subjected to great heat or chilled by getting wet.

July 5, while sitting and reading to her sister, thirty-one days after the infectious tonsillitis, she was noticed to have some difficulty in speaking, made a sound as though laughing, and then suddenly fell to the floor.

* * * * *

By the following day when I saw her again at 4 P. M., the disease had developed in a rather startling manner. There was complete loss of power in both lower limbs; she could not so much as move the toes. The knee-jerks were absent. The left leg, in testing for Kernig's sign, was more rigid than the right, but could be raised to 120 degrees. There was some rigidity of the neck muscles; it hurt her to have the neck bent. There was pain in the back while she lay still, pain in the arms only when they were moved. The temperature was 101.2-5 degrees, pulse 124. There was no eruption anywhere on the body. The spleen was not palpable, and was not enlarged to percussion. The patient had vomited several times the night before. The bowels were moved as the result of calomel and an enema. Menstruation, which had been delayed, made a show of appearing,

and—this is an important fact—there was incontinence of urine, incontinence due to an overfull bladder. There had been no convulsions since July 5; the patient slept fairly well.

* * * * *

The girl had complete paraplegia with involvement of the bowel and bladder, some paresthesiæ from the chest down, absence of knee jerks, and heat and cold felt as pain between the fourth and fifth dorsal vertebræ. The diagnosis of acute myelitis was made.

* * * * *

If then, as seems probable, the myelitis was of toxic origin, what was its kind and source? I fear this question can not be answered conclusively. One can say that a middle ear which furnished a very small quantity of pus for which there was free vent through an opening in the drum head, could scarcely furnish sufficient toxin to provoke a myelitis.

* * * * *

One can not exclude a toxemia due to the toxin secreted by the same organism that caused the tonsillitis. It seems to me that the period of development of the myelitis is rather against this origin. I should have expected it to occur in early convalescence, not after two weeks when the patient was apparently well. Usually such sequelæ appear before the patient is so far convalescent that he is able to be out of doors. Moreover, the scarlatinal poison does not appear to cause myelitis, or does it very rarely.

* * * * *

The nature of the poison, whether an infection or toxemia, and its source have still to be considered. As the myelitis began thirty-one days after the infectious tonsillitis, it seemed very unlikely that the particular germ which caused the tonsillitis had developed in the cord also. That the germs may be found in the cord is shown by the reported cases of Baumgarten, who in a case of ascending paralysis found anthrax bacilli in the cord; and of Curschmann, who in a similar case after typhoid fever, found typhoid fever bacilli which he was able to propagate in pure cultures. Usually involvement of the brain and cord, due to the infective agent itself and not to the toxin, occurs concurrently with the original disease not long afterward.

* * * * *

My conclusions are, first, that we had to deal with a case of myelitis which produced complete but transient paraplegia, the poison benumbing, not destroying, the white matter, and affecting the brain and peripheral nerves only very slightly; second, that the poison was chemical, not vital, that it may have been the secretion of the organism causing the infectious tonsillitis, but more probably was of gastro-intestinal origin; third, that the survival of the child was due primarily to the small dose of poison, and subsequently to the extreme care used to prevent infection of the bladder during catheterization. The restoration of motion has been more rapid and more complete than at the beginning I could hope for.

"CURING" ENLARGED TONSILS means curing the individual. Chronic remedies, antisycotics as well as antipsorics, are almost invariably general

rather than local. Thuja, calcarea, sulphur, psorinum, iodine, silica, natrum muriaticum, natrum sulphuricum, aurum, etc., must be given to eradicate disease tendency which ultimates itself in chronic enlargement of the tonsils. The above list of remedies is what I have found to cover most of the cases of enlarged tonsils and adenoids, but I have always given the remedy on indications of a general rather than of a local character. It is rare that a single dose or a single remedy effects a cure; two years is about as short a time as such conditions can be eradicated, and that after a series of potencies and usually more than one remedy.

Tonsils which have undergone repeated suppurative processes and have become masses of hard cicatricial tissue may act as foreign bodies and require removal; but operative measures are not wise until after a course of careful prescribing has brought about a condition of health in every other way in the patient; it is not safe to remove even such a mass as this until you are perfectly sure that the system no longer needs it, that the time has come when it is really a foreign body, the result of curative action, and is ready to be thrown off.

The following conditions have been present after surgical removal of adenoids which were not present before, and developed so soon after operation that it is at least worthy of consideration whether there is any cause and effect relation: chorea and epilepsy; chest conditions, such as bronchitis, pneumonia and asthma. Cases of asthma that were going to be "cured" by the removal of adenoids I have seen grow decidedly worse after such operative interference. Children that were going to be prevented from having frequent head colds I have seen afflicted with bronchitis and pneumonia after operation. The presence of enlarged tonsils or large adenoid masses is not of itself an indication for surgical interference; it is only when they have become foreign bodies, no longer capable of performing the functions for which they were certainly intended, and are a burden to the body that we are justified in removing them; and such cases are very rare indeed.—Henry L. Houghton, *Hom. E. E. and T. Journ.*

SYPHILINUM.—By James Tyler Kent, M. D. Whenever the symptoms that are representative of the patient himself have been suppressed in any case of syphilis, and nothing remains but weakness and a few results of the storm that has long ago or recently passed, this nosode will cause reaction and restore order and sometimes do much curing, and the symptoms that must always be present, that represent the disordered state of the economy will appear to guide to a restoration of health. When a syphilitic patient has suffered from a course of typhoid he may be very slow in convalescing, but a single dose of Syphilinum high will cause him to eat and feel stronger and gain rapidly. How does the old school treatment of syphilis differ from barbarism? one might well ask. The strong drugging by mercurius and iodides so debilitates that all who pass through are invalids and weak; even then they are not cured of syphilis—if they were cured we would not cause to come back the symptoms that have been removed. Syphilinum often does bring back the ulcers in the throat and the eruptions. When there are violent neuralgias of the head, in sides of head and over the eyes, great soreness in bones of legs and head, and the multitude of symptoms of nerve syphilis all nondescript, then it is that the

patient will be made free from suffering, and given sleep, strength and appetite. But the ulcers and eruptions will come back in some cases, and it is all the better if they do. It is by no means limited to patients who have had syphilis. It can be used like any remedy against the symptoms of the provings, or such as are similar to symptoms common to the disease or against the symptoms like the numerous verified clinical symptoms. Many symptoms are worse at night in bed, many come on in the evening and last till morning. *From sundown to sunset* marks the time of many violent pains and sufferings. Some are better from heat, and some are better from cold air and cold applications. There is great prostration in the morning on waking. It has cured many cases of epilepsy. Epileptic convulsions after menses. *Sleeplessness*, sometimes only one-half of the night, again the whole night. The blood feels hot flowing through the arteries during the night. Wandering pains here and there all over the body. Pain in the periosteum, nerves and joints. Pains sometimes increase gradually and decrease gradually. . . . *The Critique.*

AN OZAENA REPERTORY. Hobart J. W. Barlee, M. D., Paris, France.
[The following, by no means exhaustive or complete, is suggestive:]

Weak smell or entire loss: Alumina, Aur. met., Calc. carb., Graph., Kali bich., Sang., Sepia.

Increased power of smell: Sang., Con.

Excessive acute smell with purulent discharge: Con.

Fetid smell before nose: Sepia.

Putrid smell when blowing nose, recognized by the patient, although olfaction is impaired: Aurum met.

Unbearable odor: Ars., Asa. Aur. met., Aur. mur., Calc. fluor., Elaps, Graph., Nit. ac., Sep., Ther., Thuja.

Smell like putrid herring pickle: Elaps.

Smell worse during menses: Graph.

Smell of animals in back part of nose: Con.

Septum swollen, red, sore to touch: Alumen, Con. (stitching pains), Hydrast., Merc. iod. flav.

Perforation of septum: Aur. mur., Kali bich. (ulcers.)

Perspiration of septum: Merc. cor.

Discharge sanious: Alumen, Calc. carb., Con., Hydrast., Kali carb., Merc. iod. rub.

Discharge thick, yellow: Alumina, Aur. met., Graph., Merc. iod. rub., Nit. ac.

Discharge like glue: Merc. cor.

Discharge greenish, yellow: Calc. fluor., Kali iod., Nat. carb.

Discharge yellow, red: Calc. carb.

Discharge orange yellow: Lycopod.

Discharge greenish: Asa, Kali carb., Puls.

Discharge acrid, watery, cool: Kali iod.

Discharge making lips sore: Calc. carb., Mag. mur.

Scabs in nose: Alumina, Ars., Aur. mur., Carb. an., Graph., Kali bich., Lach., Nit. ac., Petr., Sepia, Silic., Thuja.

Painful scabs: Thuja.

Bleeding surface under scabs: Alumina.

Nose sunken in: Aur. met.

Caries of bones: Asa, Aur. met., Aur. mur., Merc. iod. rub., Ther.

Caries with feeling as if nose would burst: Asa.

Caries in cheek bone with ear trouble: Aur. mur.

Osseous growths in nose: Calc. fluor.

Little boils in nose with burning sensation, < during menses: Carb. an.

Saddle across nose with copper colored eruption: Carb. an.

Epistaxis: Calc. carb., Elaps, Kali carb., Sang.

Epistaxis frequent and profuse, almost to fainting: Calc. carb.

Epistaxis when the nose is violently blown: Elaps.

Ulceration in nose: Alumen, Ars., Asa, Aur. met., Aur. mur., Bals. Peruv., Hydrast., Iod., Kali bich., Nit. ac, Sang Sil., Thuja.

Ulceration in nostrils: Ars., Aur. mur., Carbo an., Graph., Mag. mur., Phos.

Nostrils sore and crusty: Alumina, Ars., Graph., Hydr., Iod., Kali carb., Lach., Lac. can., Merc. cor., Petr., Thuja.

Nose swollen, red: Alumina, Calc. carb., Carb. an., Iod., Kali iod., Phos.

Red tip, skin peels off: Nat. carb.

Eruption of nose. Asa. Carb. an., Sepia, Thuja.

Dryness of nostrils: Aur. mur., Graph., Kali Bich., Phos., Sil.

Discharge from post. nares: Elaps., Hydrast., Kali bich., Merc. cor., Merc. iod. flav., Merc. iod. rub., Nit. ac., Pet., Ther.

Nose stopped up and runs at same time: Merc. cor.

Pain: Asa, Aur. met., Carbo an., Con., Elaps, Iod., Kali bich., Kali iod., Merc. iod. flav., Nit. ac., Ther.

Tearing pains from within out: Asa., < at night.

Burning pains: Aur. met., Carb. an. (during menses), Con.

Pain from root of nose to ears when swallowing: Elaps.

Pain in septum, stitching: Con. (sharp) Merc. iod. flav.

Pain in frontal sinus: Kali bich., Kali iod. (burning and throbbing), Nux v. (dull), Ther.

Pain as from splinters in nose: Nit. acid.

Pain, throbbing, in forehead extending to occip.: Ther.

Migraine: Sang.

Bony destruction in ear with obstinate otorrhæa: Aur. met.

Purulent otorrhæa, smelling like putrid meat: Ther.

Oozing behind ears: Graph.

Itching behind ears, she would like to scratch them off: Ther.

Itching of tip of nose: Sil.

Cold nose: Sil.—Hom. Eye, Ear and T. Journal.

THE EPIDEMIC REMEDY MUST BE THE SIMILLIMUM. J. J. Davis, Racine, Wis., says: The homœopathic physician is from time to time newly impressed by the power of certain remedies that he has been using and the characteristics of those remedies rise to the surface of the materia medica lore that he has accumulated not because they are new, but simply because of added verifications. . . . One of these, as yet, inexplicable peculiarities of epidemic diseases is the individuality of the epidemics, and nowhere is the advantage of the well-equipped follower of Hahnemann more

manifest than in his ability to choose the remedies for the epidemic that he is treating regardless of what may have been the best treatment of former epidemics of whatever, nosologically and etiologically speaking, the same disease.

RECTAL TAMPONS IN THE TREATMENT OF CHRONIC CONSTIPATION.—Quite a large proportion of cases of chronic constipation have their origin in intestinal muscular atony. Dr. J. A. Macmillan, of Detroit, writing in the *Medical Record* (Dec. 16, '05), states that normal peristalsis depends upon the stretching of the bowel muscles by the feces. In the complex diet of modern civilized society, there is often too little waste material to instigate peristalsis and constipation is promoted. To act as a substitute for the normal bowel contents, Dr. Macmillan uses tampons of absorbent cotton, cheese cloth or lamb's wool. The tampon should be sufficiently large to somewhat distend the bowel. It can be inserted through a proctoscope and packed into place by means of a long forceps. The best results are obtained when the tampon is placed above the rectal folds, so as to cause distension at the rectosigmoidal junction. Each tampon has its attached cord to facilitate withdrawal. It can be kept in place for from two to six hours. If it is inserted early in the afternoon and withdrawn in the evening, a constipated movement will probably occur in the morning. The doctor usually starts by using a tampon every other day, increasing the time between treatments as improvement is noted. Macmillan summarizes his experience as follows. 1. Prompt and uniformly good results have followed the use of tampons in more than 100 cases of chronic constipation. 2. Stretching of the rectal muscle removes the immediate cause of the chronic constipation when it is due to muscular atony. 3. Distension is the physiological stimulus of peristalsis. 4. When distension is to be used in a hollow viscus, there are three important requisites: (a) The agent must produce no effects that might militate against the desired result. Liquid suits for distension of the bladder, stomach and blood vessels, but the vagina, uterus and lower bowels need solids. The lower bowel does not tolerate liquids any better than the bladder tolerates solids. (b) The chemical characteristics of the agent must not produce abnormal irritation. (c) The amount and duration of the distension should correspond with the amount and duration of distension by the normal agent. Physiological distension of the sigmoid and upper rectum often continues for several hours before defecation occurs; accordingly the tampon should be large enough to cause some distension and should be kept in position for from one to six hours. 5. The rectal tampon compensates for the shrinkage of the fecal mass due to absorption. 6. The use of the rectal tampon is attended by no danger to the patient, and little or no discomfort. It seldom interferes with occupation.—*N. A. Jour. Hom.*

FOREIGN LITERATURE

CONDUCTED BY E. FORNIAS, M. D.

From English, French and Spanish sources I have obtained the following pediatric conclusion and precepts:

1. The greater number of atreptic children come from the centres of toil and privation, are the issues of overworked or infirm parents, and frequently the fruit of adultery and vice, so we should not wonder why they are bottle-fed and why our best directed efforts fail in reducing their frightful mortality.

2. In a better social class, the little creature is often cruelly condemned unnecessarily to artificial feeding by the coldness and selfishness of the parents, who do forget their sacred duties towards their progeny.

3. There is still another class of children, from various sources, who either suffer from congenital debility (from premature delivery or antenatal accidents) or carry with them the stigmata of parental disease (syphilis, etc.).

4. There are even cases in which the wasting is progressive and the children die without one being able to determine the cause of the fatal issue.

5. When an atreptic child is progressively wasting and going down to dissolution there is withdrawal or failure of the nutritive process, and the natural consequence is degeneration, which if not checked terminates in death.

6. The degree of wasting is evinced by the emaciated face, pallor, tumefaction and grimaces, and principally by the large abdomen, contrasting with the emaciated and shrivelled limbs.

7. Wasting is due to malnutrition and usually dependent upon a chronic gastro-enteric disorder that finally reaches the state of cachexia, when constructive metabolism suffers a halt and the living cells seem to lose their selective capacity.

8. Marasmus is a toxic cachexia which incapacitates the virgin organism to appropriate nutritive material to strengthen the frame and arrest the ravages of catabolism. It is an impending anatomico-physiological bankruptcy with a progressive course to ruin if the losses are not balanced by an adequate supply.

9. It is a difficult task to nourish a frame that is burning up whatever fat has been left by retrogressive metamorphism, that sacrifices the albumen and that neglects the reserves of carbo-hydrates, which represented by glycogen, are very small.

10. Destructive metabolism keeps on changing nutritive material into waste products, which become the pabulum of pre-existing toxins, so we should not be puzzled by the persistent manifestations of auto-infection.

Perhaps the gastric toxins are clashing with digestion or the intestinal with absorption, for in both instances the accumulated waste seems to have made of these regions the pasture-land of microbes and the soil of secondary infection.

11. Disturbed osmotic processes also hinder the necessary mutual interchange between the fluids and substances of the body, for while the blood is receiving water, it is giving out its coloring matter and other constituents, and while it is receiving oxygen it is emitting carbonic acid and water. Operations which readily show the various influences that may alter or arrest the formative process peculiar to living bodies and threaten their integrity.

12. The causes of atrepsia may be conveniently grouped as follows: Congenital debility (from premature delivery or ante-natal accidents); gastro-enteric catarrh, perhaps the leading cause; organic diseases (congenital syphilis, latent tuberculosis, rachitism); inability to suck, unsuitable teat, &c.: insufficient nourishment.

13. The study of the pathological nutrition of first infancy, comprises both the nutrition of the babe born in a state of congenital debility and the nutrition of the infant affected with digestive disorders.

14. Congenital debility is that state of the offspring born before term, with incomplete organs and imperfect functions; frail, puny creatures, with bright red, transparent skin and without adipose tissue, who usually die from inanition, hypothermia or infection.

15. The disorder of calorification in the prematurely born is so great that to save them from early death they are placed in special incubators (*couveuses artificielles*).

16. Hypothermia. In birth at term, just after delivery, there is a slight lowering of the temperature (from 38° to 37° , or 36° ; the rectal temperature falls even lower), but in the prematurely born the initial fall is very marked. The hypothermia is due to a feeble development of the adipose tissue, to a reduced production of heat, on account of respiratory insufficiency (bronchial breathing and pulmonary atelectasis) and circulatory weakness (myo-cardiac asthenia and persistence of the foramen of Botall), and to debility of the thermogenic nervous centres.

17. The hypothermia of congenital debility is in relation with the weight of the offspring. According to Dr. Potel, the average weight of those born in this condition is 1498 grammes for the term of $6\frac{1}{2}$ months—1700 grammes for 7 months—1900 grammes for $7\frac{1}{2}$ months, and 2150 grammes for 8 months. According to Dr. Budin, the mortality is always in proportion with the weight and the lowering of the temperature.

18. There are various forms of *couveuses* (incubators), more or less practical, but all should meet the following demands: 1, a constant temperature (30° to 32°); 2, be easily ventilated; 3, be well exposed to light; 4, hold an humid atmosphere; 5, be readily disinfected (*couveuses en verre*).

19. The temperature of the *couveuse* should vary with the rectal temperature of the infant. For Dr. Weill the rule is: 32° if the temperature of the infant is below 35° ; 30° if the temperature is 35° , and 28° if it is 36° . Not including exceptional cases, Dr. Mudin believes that a temperature of from 25° to 26° is sufficient for all cases.

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URETERAL CALCULI.

BY

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THE accompanying illustration (see page 722) shows nicely (actual size) a large calculus which I removed from Mr. McCollum's right ureter on July 18, 1906. This stone weighed 1,720 grains and was very hard and firm.

Mr. McCollum is 38 years old. At the age of 8 he had "Bright's disease"; at 21 he passed a lot of "gravel" and pus, following severe pain in the back; he suffered from backache and pain in the right groin frequently until last February, when his general health had deteriorated materially, and surgical aid was decided upon. His pain in loin and groin was now very severe, simultaneously with which he also experienced tenderness and a feeling of fullness, pressure and tension in these localities. This ensemble of symptoms caused a suspicion of appendicitis, but his history of right-sided renal colic and the presence of pus and muco-pus in his urine, and its marked increase in quantity after an attack of pain and fullness led me to a diagnosis of pyonephrosis and pyoureter. Examination of his bladder was negative; he passed about fifty ounces of urine daily, which had been free from albumen, casts and pus until two days before operation.

Operation: Nephrectomy. Under ether an Edebohl's incision was made and a large, irregular kidney, softened and necrotic in many places, was exposed. Incision showed it to contain multiple foci of suppuration.

Its pedicle was securely ligated with Van Horn chronic gut, No. 2, and it was removed. The upper end of the ureter was considerably dilated and its wall greatly thickened; pus escaped from it. I next passed a long probe down through it to discover any obstruction, if present. I could find none (because my instrument did not reach to the bladder). I packed the upper end of the ureter with gauze and partially closed the loin wound.



A good convalescence followed. A peculiar and unexplained symptom was the post-operative vomiting of a large quantity of blood, which appeared also in the stools for three days. Adrenalin, given by mouth, stopped this internal hemorrhage promptly.

The urine never cleared up after this nephrectomy, and a sinus persisted in the loin. Pain in the groin continued. Every few days there would be an attack of pain and fullness in the right side, when an outburst of pus would occur at the sinus, and the urine would be extra "muddy."

My diagnosis again was pyoureter. No special obstruction

was suspected because of the large amount of pus in the urine, showing a patulous ureteric opening into the bladder. There were no symptoms of cystitis; I sounded the bladder carefully with negative result. The cystoscope was not used because of the persistent presence of pus in the bladder. For the same reason no effort was made to bougie the ureter with wax-tipped catheters.

An extraperitoneal ureterectomy, or its equivalent, was decided upon. The lumbo-ilio-inguinal route was chosen on July 18, 1906, and when the ureter was reached and incised at least a quart of thick, creamy pus escaped. Exploration now revealed a large calculus impacted in the lower end of the ureter, close to the bladder and rectum, and so tightly adherent to the surrounding ureteric wall that it was extricated with the greatest difficulty, and only after the ureter had been split down to the bladder. The insertion of a rubber drainage tube and iodoform gauze completed the operation. The patient's after behavior and recovery were perfect.

Ureteral calculi are comparatively rare. It is a generally known fact that the majority of stones formed in the upper expanded portion of the ureter (the so-called renal pelvis) are either washed or forced into the narrower part of the duct and through it into the urinary bladder. But the stone may be arrested at any point along its downward course, although it is more frequently caught (1) just below the renal pelvis, (2) where the ureter passes over the brim of the pelvis, (3) or at the vesical orifice of the ureter. In sixty-eight cases of ureteric stone classified by Schenck (*Jour. Amer. Med. Assoc.*, May 11, 1901) nineteen calculi were located within six centimeters of the kidney, eight at or near the pelvic brim and forty-one within five centimeters of the vesical orifice. The anatomical narrowing of the lower end of the ureter at its point of entrance into the bladder and its oblique passage between the several layers of the vesical wall easily explain the increased frequency of detention at this level. This obstruction, then, if sufficiently complete, results in hydronephrosis or pyonephrosis; if only partial it acts like a ball-valve, producing a lumbar mass with symptoms of fullness and pressure, as in the case reported above. An increased flow of urine and pus indicates a relief of the obstruction.

Much stress is laid upon the usefulness of the X-rays in arriving at a diagnosis; their negative finding is as valuable as

their positive, so say the X-ray specialists. All, however, must confess to the difficulties of accurately and positively diagnosing the presence of a small ureteral calculus by X-ray examination. While calculi of renal origin intercept X-rays more successfully than those formed in the biliary tract, the difficulties of locating a small ureteral calculus are hardly lessened by the fact.

Hematuria is a possible concomitant condition in ureteral as well as in renal calculus. Macroscopical hematuria is of common occurrence at the time of an attack of colic—following the acute symptoms, but it does not persist, and its absence does not argue against the detention of a stone in the ureter. It is a mistake, therefore, to allow the absence of this symptom to contra-indicate operation. Of much greater significance is microscopical hematuria, whose demonstration, coupled with the appropriate clinical phenomena, is, and should be, looked upon as conclusive evidence of the presence of a stone. Urinalysis, therefore, will both give new information and confirm symptoms already known.

The wax-tipped ureteral bougie, or catheter, is easily introduced into the ureter in the female, after the method of Kelly, and if scratches are found on its surface it is presumptive evidence of stone. This means of diagnosis is not so easily applicable to the male ureter, because of cystoscopic difficulties. In the case I have reported it was found to be impossible. The cystoscope, the ureteral catheter and the segregator, while all of value at times should be employed with due caution in septic cases.

Calculi may be removed from the lower end of the ureter by the intravesical route, the cystoscope, the perineal route, the intrarectal or perirectal route, by resecting a portion of the sacrum (sacral route), the intraperitoneal route and, best of all, from any portion of the ureter, by the ilio-inguinal extraperitoneal route.

THE DIAGNOSIS OF SURGICAL LESIONS IN THE LOWER ABDOMEN.

BY

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ALTHOUGH the advance in abdominal surgery during the past decade has been quite limited to the organs situated in the upper abdomen, namely, the stomach, duodenum, liver, gall-bladder, bile-ducts and pancreas, yet diseases originating in the organs located in the lower abdominal cavity are likewise grave, and are prone to develop a train of complex symptoms, masking the primary lesion; hence our responsibility in making an early diagnosis and instituting prompt treatment.

Inflammatory Diseases of the Fallopian Tubes has, for its most prominent symptom, pain, localized in either lower quadrant, usually just above the mid area of Poupart's ligament, and when the involvement is bi-lateral, extending across the entire lower abdomen. The character of the pain varies. It is constant, and may be dull or sharp, with frequent acute paroxysms from movement or pressure. When the ovaries are involved, the pain is described as "burning." In the acute stage of tubal inflammation, the patient is usually confined to bed, with the limb flexed; since an attempt at assuming the erect posture is attended by pain, necessitating a forward bend, each step producing excruciating pain.

The pre-menstrual, pelvic congestion is an occasion for severe pain, which is usually relieved by the oncoming flow; but returns a few hours after beginning of the same, and gradually increases after cessation. Backache is a more or less constant symptom, and owing to the anatomical relation of the rectum, defecation is particularly distressing. Leucorrhœa, frequently from the uterus, and of an infective origin, is present in the larger number of cases and escapes from the vagina in a regular flow. When the discharge is from the tubes, the flow of pus is intermittent. Menorrhagia is the rule, the period being lengthened in time, and the flow increased in amount. In some cases the secondary anemia becomes a dangerous condition.

The general systemic symptoms, i. e., emaciation, digestive disturbances, neurasthenia, etc., are present in each instance to a degree. The facial expression is anxious, and the color varies from a waxy-white to a decided cachexia. In a small

percentage of cases the diseased tubes cause very slight local or systemic disturbance. Bi-manual examination in the acute cases is unsatisfactory without anesthesia, owing to rigidity of the over-lying muscles and exquisite sensitiveness of the vaginal vault. In the sub-acute or chronic stage, the diseased tube is found distended or hardened, displaced into the posterior cul de sac, and bound down with adhesions. Retro-displacement of the uterus is the rule, and owing to the forced proximity of the ovary, the latter becomes early inflamed. In some instances the tubes are found in front of the uterus, close to the bladder; in others their position is normal. When they are prolapsed into the pouch of Douglas, they are often so intimately adherent to the uterus that a most painstaking examination is required to accurately locate the various pelvic organs. Hydrosalpinx and hematosalpinx are conditions producing a lesser degree of sensitiveness to pressure than pyosalpinx, and the same may be said of tuberculosis. When the tube is enlarged and hardened, resembling a pipe-stem, chronic interstitial salpingitis (the least dangerous of the inflammatory tubal diseases) is assumed. Tumors of the Fallopian tubes are diagnosed by abdominal section and microscopic examination.

Extra Uterine Pregnancy is a condition which makes early recognition imperative. In the greater number of cases the diagnosis is made at the time of rupture, owing to the absence of discomfort prior to this catastrophe. A patient who has missed her normal menstrual period, and complains of periodic attacks of pain, however slight, in either tubal region, should be immediately examined and constantly observed thereafter, until a diagnosis of ectopic pregnancy can be eliminated from further consideration. If the gestation is within the lumen of the tube, it can be recognized by repeated bi-manual examinations made at weekly intervals, the principal features for recognition being enlargement of the impregnated tube, with extreme sensitiveness when the distended area is subjected to examination. Care must be taken to differentiate from a chronic tubal disease in the early stage of a uterine pregnancy. Rupture of the tube may take place any time after the seventh week, and in many cases is the first symptom indicative of abnormality that the patient experiences.

After rupture, diagnosis is difficult, owing to the intense pain produced on introduction of the examining finger. Should

the tube break very early in the gestation, especially where no large vessel is torn, the condition may never be recognized, the pain and hemorrhage being mistaken by the patient for a severe menstrual period. In such cases recovery is rapid, since the ovum and blood are entirely absorbed. With a history of impregnation followed by the early signs of pregnancy, with cramp-like pains in either tubal region, the discovery by bimanual examination, of a sensitive tumor near the uterus should make the diagnosis clear. As a rule, rupture of an impregnated tube divides vessels of considerable size, which bleed profusely. Such cases suffer sudden, severe pain, immediately followed by collapse, and if surgical treatment is not resorted to, an early death is inevitable.

In making a diagnosis of extra-uterine pregnancy, careful differentiation is necessary. Rupture of a varicose vein in the broad ligament, rupture of an ovarian cyst, torsion of the pedicle of an ovarian cyst, acute pyosalpinx and pelvic tumors complicating normal pregnancy, have all to be considered. Schauta's statistics show that extra-uterine pregnancy without surgical interference has a death-rate of sixty-five per cent., while cases having the proper surgical treatment have a mortality of only five per cent. These facts serve to impress upon us the importance of early diagnosis.

Fibromyomata of the Uterus involve the lower abdominal cavity. When the tumor is of the sub-peritoneal variety and of large size, the abnormal symptoms present are due to pressure, requiring removal. They are recognized by their attachment to the uterus, smooth surface and lack of sensitiveness. Unmarried and sterile women between the ages of thirty and forty years are most frequently affected with fibroid tumors.

Tuberculous Peritonitis presents many difficulties in making an early diagnosis, there being no characteristic indications of the morbid process; but when a pulmonary lesion can be associated with the abdominal condition, diagnosis is rendered less difficult. When the disease involves the lower peritoneal cavity, and tubercle bacilli are found in the uterine discharges, it is characterized by a diffuse development of miliary tubercles. In some cases, however, they are only over circumscribed areas, associated with tumor formation, and localized ascites. The cases showing the most profound systemic disturbances are those having caseous abscesses, which cause numerous

adhesions and injury to the bowel, by perforation of a tubercular ulcer, or the formation of cicatricial bands leading to bowel obstruction. In the majority of cases of tubercular peritonitis, early diagnosis affords the patient a probable recovery through operation.

Perforation of the Intestine During Typhoid illustrates the advantage gained by early recognition of a most dangerous condition. One-third of all deaths occurring from typhoid are the result of intestinal perforation; but twenty-five per cent. of these patients can be saved, if diagnosis is immediate and surgical interference promptly instituted. Unfortunately the gravity of the condition is not revealed until peritonitis develops.

Perforation most frequently occurs between the twelfth and twenty-eighth days of the disease. The classic symptom is that of sudden, localized abdominal pain, severe in character and usually confined to the lower right quadrant of the abdomen. Upon examination rigidity and tenderness are immediately recognized. There is a rise in temperature, pulse and respiration, and symptoms of peritonitis soon follow; but operation (to be successful) should be performed before these symptoms develop. When collapse occurs, it is the result of hemorrhage rather than perforation.

The Diagnosis of Appendicitis is not always made sufficiently early for the best protection of the patient. With a frank attack, the symptoms commence with pain in the epigastrium and umbilical regions, later settling over the appendicular region, nausea and vomiting, constipation or diarrhoea, rigidity of the over-lying muscles and tenderness upon slight pressure. On the contrary, the patient may have conditions present causing the most astute diagnostician to hesitate in giving an immediate opinion. The surgeon, who when consulted, abruptly exposes the abdomen (before hearing the history of the case), and while pressing deeply over McBurney's point discovers tenderness, makes the diagnosis of appendicitis and prepares the case for operation, frequently has the unfortunate experience of subjecting the patient to an operation for removal of the appendix, when quite other pathologic processes are responsible for the patient's illness.

In the severe types of appendicitis, the onset is abrupt. Severe pain over the entire abdomen, chills and fever, with persistent vomiting, rise in temperature and pulse rate which re-

main elevated, and a distended abdomen are unmistakable evidence of an extension of the disease. When this condition is permitted to continue, the patient soon flexes the right thigh and leg, and examination reveals a mass of tumefaction in the right iliac fossa, with exquisite sensitiveness to pressure, together with all the symptoms of pus formation, which are usually due to a perforated appendix, with edema still to follow, associated with swelling over the affected area, and finally fluctuation. A case of this character may not have protecting adhesions, and suddenly develop septic peritonitis, following the perforation. The diagnosis of appendicitis may be obscured by an abnormal position of the organ. Two such cases were cited by the writer and illustrated in the "Transactions of the American Institute," 1903.

In one case pain was referred to the right kidney and operation revealed the appendix anchored to the lower pole of the kidney. The second patient complained of pain in the left abdomen, with occasional transmission to the right side. Upon opening the abdomen the appendix was found densely adherent to the left Fallopian tube, which was also involved in the inflammation. In cases wherein the tumefaction has extended over a long period of time, the possibility of malignancy or tuberculosis must be considered. The flexed thigh, when of long standing, may be due to hip-joint disease or psoas abscess. Some patients will refer to certain urinary or rectal symptoms; especially is this the case in women having associated pelvic disease. In all cases of this character, both a vaginal and a rectal examination should be made, and in making a diagnosis in pelvic inflammation the appendix should always be considered the seat of trouble, until conditions arise, which positively indicate an associated organ, as the seat of primary involvement.

Intestinal Obstruction results from intussusception, volvulus, tumors, strictures and foreign substances. In intussusception the presence of a tumor is suspected and the stools should be examined for contained blood. Volvulus is most apt to occur at the sigmoid flexure, or about the cæcum, and presents the symptoms of acute abdominal obstruction.

Tumors of the lower abdominal cavity may be palpated through the abdominal wall; their presence may lead to chronic obstruction. Strictures of the bowel may be congenital, or produced by cicatricial contraction; the result of ulceration

during the course of syphilis; tuberculosis; or, very rarely, may occur as the sequelæ of typhoid or dysentery. Carcinoma of the descending colon and sigmoid is a frequent cause of obstruction from stricture. Foreign substances, i. e., false teeth, fruit stones, pins, etc., are occasionally found as a cause of the trouble. Hardened substances formed within the body, such as fæces, gall-stones and enteroliths, have produced bowel obstruction.

Any of the above mentioned conditions may cause acute obstruction, identified by the pain, vomiting and constipation. The pain is at first colicky; but soon becomes very intense and continuous. The vomiting begins with the gastric contents, next bilious, and finally stercoraceous. When the lower intestinal tract is the seat of obstruction, the abdomen is markedly distended. Obstruction produced by stricture or carcinoma is at first only partial; hence the symptoms are gradual, months or years elapsing before a complete obstruction is developed. In these cases the initial attack comes on with indigestion and tympanites; while above the constriction, the coils of intestine can often be seen in active peristalsis. Vomiting may occur, but it is not the rule. Gradually the health becomes impaired, with resultant anemia and emaciation, and finally symptoms of complete obstruction supervene.

A thorough examination should be made in every case of bowel obstruction. Abdominal inspection and palpation will often reveal regional prominences, indefinite masses and dilated coils of intestine in hyper-peristalsis. During a spasm of severe pain, the coils of intestine can be seen to stand out prominently above the obstructed point. Rectal, and, in the female, vaginal examination should always be made. The capacity of the colon is about one and a half gallons, and, taking this as a standard, the fluid injected through the rectal tube should be measured.

We must remember that no clear picture is given in any case of bowel obstruction. Vomiting may be a late symptom. Bloody stools are not always present in intussusception. A tumor can be made out in only one-fifth of the cases and the temperature range is of no diagnostic value; so that each case requires individual observation of its peculiar characteristics, and the diagnosis must be made as early as possible by excluding other conditions.

When we are called to a case bearing evidence of an acute

lesion in the abdomen, we must realize that early operation is the patient's only safeguard. The development of peritonitis marks the danger line. When a case has been allowed to develop a generally sensitive and distended abdomen, with persistent vomiting and constipation, restlessness, an anxious countenance, and sunken eyes, quickened respiration, a weak, running pulse, unappeased thirst and diminished urinary secretion, we recognize general peritonitis, with a death rate that increases every hour.

TENDON TRANSFERENCE.

BY

BY W. NELSON HAMMOND, M. D., PHILADELPHIA.

Read before the Homœopathic Medical Society of Pennsylvania, Sept. 6, 1906.

AT the time that Nicoladoni first performed the operation of tendon transplantation in the Vienna Clinic, it was received with enthusiasm as offering a remedy for a class of deformities arising from paralysis of certain muscles in the extremities lying in the proximity of healthy muscles capable of being transferred.

Before the necessary requirements and limitations of such a functional change were fully understood, many operations were carried through without due regard to selection, preliminary treatment or after care; as a result many of the cases were failures and the operation was more or less abandoned, to be worked out successfully by a few conservative surgeons. The best results from this work have been obtained in distortions arising from infantile paralysis, in that class where distinct groups of muscles are paralyzed and the healthy muscles have sufficient reserve power to adequately balance the joint when some part of them is transferred.

As the macroscopical appearance has something to do with the selection of the muscles or tendons to be transplanted and the pathology of infantile paralysis is little understood, it may be well to add the results of Koch's studies of paralyzed muscles with a view to determining the prospect of their usefulness when transplanted. The muscles affected were found to be in a state of fatty degeneration of the contractile portion, varying in degree from a single fibre to the whole muscle. Where the fatty changes were found scattered throughout the muscle in

small areas regeneration took place; but where the whole muscle was affected there was no regeneration. The gross appearance of these muscles varied from the rosy appearance of the healthy muscles to the yellow color of those totally degenerated.

The electrical reactions are of first importance in making the examination for the purpose of determining the exact limitation of the paralysis and the condition of the healthy muscles. The reactions should be studied carefully and relied upon rather than the functional test, as frequently when the paralysis affects the muscles of the thigh and pelvis, changes take place in the healthy muscles and tendons about the foot, which appear as part of the paralysis, but in reality are due to atrophy and stretching, occasioned by the malposition of the foot in consequence of the paralysis involving higher muscles. The electrical phenomena to be looked for in the selection of a suitable case for this work are the normal reaction of the healthy muscle and the reaction of degeneration. Briefly put these are: In the healthy muscle a response to the faradic, and with a mild galvanic current a quick sharp contraction of the muscle at the closing of the circuit with the negative pole, but no response when the positive is applied. In the degenerated muscle there will be no response to the faradic, a sluggish contraction from the galvanic current to the negative pole with as good or better response to the positive.

The aim of the operation is a recovery of the balance of the joint stable enough to maintain the corrected position without the use of a mechanical support. This can only be successful when other means are used to correct and insure the maintenance of the part without too much strain upon the transplanted tendons. Before the tendon transference is made the existing deformity must be fully rectified and the child wear a brace to hold the joint in a corrected position for about six weeks. This insures stability of the joint and makes the tendons approximate more nearly the normal condition by compensatory shortening and lengthening. In the weak, flail joint so often found in infantile paralysis it is often necessary to open it, denude the articulating surfaces of their cartilage and thus produce an ankylosis to afford the necessary support. The method of transplantation that gives the most satisfactory results is that of Lange; in this operation the tendon is fastened directly to the periosteum or bone in the desired position.

To make the attachment secure a channel may be drilled through the bone and the tendon carried through this and sutured to the periosteum on the under surface or, as recommended by Chlumsky, splint the tendon and carry one end through and tie the two ends at the inferior surface.

The operation should be advised only in selected cases and performed where strict asepsis can be maintained. As the circulation is poor in these cases, the technique should be as simple as possible and care exercised to avoid wounding the larger vessels. The tendon must be united under certain tension, the meaning of tension in this instance is that of over-correction rather than actual strain. To get the full effect of traction it is best to free the healthy tendon from the surrounding parts and carry it as direct as possible to its new position. For this reason a long skin incision is to be preferred and should be made to avoid the bony prominences as far as possible. In freeing the tendon the old sheath must be carefully dissected out, otherwise it will pull from the old position and divert a part of the tendon's power. The suture should be made with fine silk, and, when uniting one tendon to another, a plan that I have followed successfully is to split the paralyzed tendon on the side in the longitudinal direction and insert the healthy tendon obliquely, making the suture mattress fashion, beginning at the far side and ending there, tying the knot on the side rather than above or below. In one case where I fixed the knot above the patient developed a bursa over it that interfered somewhat with the good results. Where the tendon is too short to reach to the desired position it may be lengthened by strands of silk as advised by Lange, though there is some danger of this sloughing.

The after treatment is of great importance; a plaster cast should be applied immediately after operation and retained from ten to twelve weeks, after which a light brace properly applied must be worn until all danger of a relapse is past. In the meantime, well-directed active exercises and passive motions should be practiced, as well as massage and applications of electricity, to develop the greatest usefulness of the muscles.

The end results of these procedures are well shown in a report of 164 cases and 250 operations reported by Codivilla as follows: In 92 the results were good; in 57 the results were satisfactory as regards function; in 15 there were recurrences.

The best results were obtained in cases of the equinovarus

deformity, where the tendons were transplanted directly to the bones, and satisfactory results were also obtained in the opposite distortion, where the foot was everted and the arch pronated. It is of these two deformities that I desire particularly to speak and describe several operations which have been found satisfactory. This may best be done by citing two cases with the methods used at the operations. The first was that of talipes equinovarus occurring in a boy twelve years old. The deformity was caused by infantile paralysis affecting the peronei group. He had been operated upon several times in various hospitals, but there had always been a relapse. At this operation the club-foot deformity was reduced by excising a wedge-shaped piece of bone from the astragalus with its base towards the outside of the foot, and the tendo achillis was divided. The foot was then put in an over-corrected position and fixed by a plaster cast. The cast was worn for six weeks, after which a brace was applied and used until the structural alterations in the bones were repaired and the healthy muscles had regained their tone, a period of about six weeks. The tendon transference was then made, as follows: The long extensor tendon of the great toe was divided and after making a second incision extending over the cuboid, the proximal end was carried under the skin and put through a channel in the cuboid bone and fastened to its under surface. The foot was held in an over-corrected position, while the tendon was sutured and a plaster cast applied. After the cast was discarded a light brace was used for several weeks, and the necessary means for the development of the muscles were employed. The transference in this case could have been made to the peronei tendons, but a firmer support and better position were obtained by suturing directly to the cuboid. In the correction of the equinovarus deformity the time-honored method of lengthening the tendo achillis by tenotomy was followed, but where the equinus element is not marked I believe a better operation to be a division of the heads of the gastrocnemius; this will lengthen the muscle and obviate the unsightly bunching of the calf-muscles that frequently occurs after severing the tendon.

Case No. 2 was a boy, aged seven, who had infantile paralysis affecting the tibial group; the foot was everted, the toes extended and the arch pronated. The preliminary correction of the deformity was first made, and followed by a tendon to tendon transference. The tendon of the well-developed exten-

sor proprius hallucis was divided and the proximal end sutured to the tibialis anticus close to its insertion; the distal end was sutured to the inner tendon of the extensor longus digitorum muscle. Whilst I took the precaution in this case to unite the distal end of the divided tendon with the others of the toes, it is not absolutely essential, as the extensor brevis digitorum soon overcomes any dropping of the great toe that may occur. The valgus deformity is the weakest position the foot may assume, and it is often necessary to stiffen the joint by a preliminary arthrodesis and attach the tendon directly to the scaphoid to obtain the desired correction.

In summing up the treatment too much stress cannot be laid upon the necessity of preliminary work, thorough after care, and the study of each case with a view of determining the reserve power of the healthy muscles and where the attachment may be made to secure the best balance of the joint.

CLINICAL NOTES FROM FOREIGN CLINICS.

BY

WM. LANG, M. D.

THE LORENZ TREATMENT OF CONGENITAL DISLOCATION OF THE HIP AND TUBERCULAR OF BONE ABSCESES.

THE orthopædic clinic of Lorenz is indeed a very busy place and to me the work has been very interesting. One can spend four hours every day in this clinic for a month and still feel that the time was very profitably spent. The eight examining tables are constantly occupied by a varied array of interesting cases. Although but six beds in the hospital being allowed this clinic, yet there are over 3000 new patients treated here every year, to say nothing of the old cases, which by reason of their diseased condition, must be kept under treatment and observation for even two or three years. Fortunately, the cases and their required treatments are such as can be handled within the limits of this ambulatorium. The plaster work portrays very beautifully the experience and knowledge of the numerous clinical assistants.

Lorenz claims that the very appearance of the patient is often sufficient to give you the hint as to whether the patient is suffering from a conitic or a congenital dislocation of the hip. In the former the patient shows the early manifestations

of a tubercular condition, while in the latter case the patient presents the very picture of health.

In the older patients suffering from congenital backward dislocation of the hip, where he is unable to bring the head of the femur into the acetabulum, he attempts to secure a sub spinous position of the head because there is less danger incurred of injury to the blood vessels and nerves and he then overcomes the shortening of the leg.

He does not believe in opening tubercular abscesses until they become so large that they seriously interfere with the functions of the part; and then only does he puncture them with a trocar and canula, and after evacuation seals the opening with a piece of gauze kept in place by a large piece of adhesive plaster. No attempt is made to drain them, since not only is secondary infection to be feared, but you cannot cure the tubercular focus which gave rise to the abscess by drainage alone. A psoas abscess opened and drained at the inner side of the thigh with the focus at the kyphosis, which may be in the upper dorsal region, illustrates the logic of the latter reason. In treating cases of tuberculosis of the vertebræ he does not advocate the putting of the patient to bed and thus straightening the kyphosis by reason of a postural treatment, but, rather, to have a plaster of paris corset or collar applied, and after being in bed for two days they are allowed to get up and walk about. In the very young, where the patients have not begun to walk, he has a plaster of paris cradle made and they are kept in this cradle. The straightening of the kyphosis in the postural treatment is but temporary in the greater number of cases, and it soon recurs when the patient walks about.

MOORHOF'S METHOD OF PLUGGING BONE CAVITIES WITH WAX.

Tuesday and Friday mornings are the two days selected every week by Mosetig von Moorhof for the filling of bone cavities with the iodoform plumbar, and I assure you that his work is not only interesting, but productive of very good results as well. His great success in the resection of tubercular joints lies not only in thoroughly curetting out the tubercular focus in the end of the bone and then filling the cavity with his iodoform plumbar, but also in the thorough removal of every vestige of synovial membranes. In his resections of the knee joint for tuberculosis he prefers to secure an ankylosis from bony union, and it is in just these cases that he fills up the space between the lower end of the femur and the upper end

of the tibia with the iodoform plumbar, believing that such a procedure is more productive of a firm union. On the other hand he tried to get all the motion possible in his resection of tubercular elbow joint, and consequently does not fill the space with the plumbar. It is to be understood that in these tubercular knee and elbow joints the bone cavity produced by the curetting away of the tubercular focus has first been filled with the plumbar. The method which he employs in the filling of bone cavities with his plumbar is as follows: The tubercular focus is thoroughly curetted out by means of a short curette, after which it is flushed out with a 1 per cent. formalin solution and a strip of plain gauze is backed into the cavity to absorb the excess of the formalin solution. The cavity is then thoroughly dried out by means of hot air. He uses an electrical apparatus, very much like the paquelin thermo cautery—air being forced by means of a rubber air bulb through a small opening in a jacket heated with the electric current. He claims that equally good results can be gotten from the ordinary paquelin thermo cautery provided you do not let it touch the walls of the cavity, but allow the radiating hot air to dry it. The plumbar which has been liquified by putting the bottle containing it in hot water, and after shaking it thoroughly, is poured into the cavity. The plumbar will solidify in about ten to fifteen seconds. The wound is then sutured except at its lowest angle, where a rubber drainage tube is placed. The part is then encased in a fixed dressing. Unless complications ensue the dressing is not removed until the twelfth day, when the drainage tube is removed and the part again placed in a fixed dressing. Six weeks is the allotted time for keeping the part in a fixed dressing, although the dressings are changed every two weeks. In the case of tubercular elbow joint passive movements are made at each redressing. The formula for his iodoform plumbar is as follows:

R. Iodoform, 60 parts.

Oil sesame, 40 parts

Spermaceti, 40 parts

M. It is put into long, narrow bottles and sterilized. When required for use the bottle is put into hot water, which liquifies, and after being thoroughly shaken it is poured into the cavity.

In the parenchymatous form of goitre he does not advocate the removal of the goitre, but prefers to shrink it by the hypodermic injection of a mixture of iodoform sulphuric ether and oil of sesame, the formula for which is as follows:

R. Iodoform, 6 parts.
Sulphuric ether, 5 parts.
Oil of sesame, 10 parts.

M. A hypodermic syringe is filled with this mixture and injected into the goitre twice a week until the goitre has shrunk-en. This may take place in two, three or four weeks.

THE USE OF PARAFFIN IN REMOVING DEFORMITIES OF THE NOSE AND FACE.

You have already heard of Gersung and his paraffin injections, but one should visit his clinic in order to fully appreciate the technique, together with the brilliant results which he obtains. He holds his clinic on Friday mornings after he has finished his general surgical clinic, and it is surprising to note the large number of patients, to whom nature appears to have dealt rather unkindly, attend these clinics. In probably no other clinic will you find as many cases of atrophy and hemiatrophy of the face, although these conditions are quite rare. The photographic art has been intimately woven with the work of this clinic, so that an hour or two spent in looking over the technique which he employs in these injections is as follows: A pravaz syringe, which corresponds to our hypodermic syringe, is filled with Schleich's solution and the needle of which is pushed through the skin and into the sub-cutaneous tissue where from 10 to 20 minims of the Schleich solution is injected; the piston of the syringe is then pulled back, and if no blood is drawn into the syringe by the pulling back of the piston you can be positively sure of your not having entered a blood vessel. The needle is allowed to remain in situ, but the syringe is removed. An all-metal syringe, which contains either pure olive oil or the paraffin mixture, is then attached to the needle, and the contents are slowly injected with the right hand, while the thumb and first finger of the left hand moulds the mass as it is being injected. It may be necessary to inject two or three syringefuls of the oil or paraffin mixture, as is indicated by the case. He advocates the injection of a small quantity at different sittings rather than to inject a large quan-

tity at one sitting. Photographs of the patients taken before and after treatment has begun will fully repay you. It is very amusing to hear Dr. Gersung ask his patients to point to the spot where they wish him to make his injection at this sitting. During the preceding seven days they have hunted diligently for the depression which, when filled by the injection, will the more rapidly make their appearance presentable to the gates of labor or society.

The paraffin which he uses is the lencaculeum paraffin of the German Pharmacopœa and it corresponds in consistency to our white vaseline. This paraffin is mixed with olive oil in varying proportions, from one part of the former to eight parts of the latter. Usually a mixture of one part of the paraffin to three or four parts of the olive oil is used; in some cases only pure olive oil is indicated. In those cases, where he wishes to retain the movement of the overlying skin with the underlying muscle, he injects pure sterile olive oil. This, then, would answer very well in cases of atrophy and hemiatrophy of the face, in which the spots of depression lie within the smiling area. In other cases, where only a small amount of movement is desired, a proportion of paraffin one part and six to eight parts of paraffin may be injected. In the remaining cases where no movement takes place, a mixture of paraffin one part to three or four parts of olive oil is used, such as in depressions about the nose. In short, paraffin injection may be said to produce a fixed mass-like cartilage. A large quantity of pure olive oil may be injected without producing gangrene from a shutting off of the nutrition, because it is slowly absorbed, while on the other hand care must be exercised in not injecting a large quantity of paraffin mixture under pressure, since gangrene may result. In some cases it is necessary to separate the skin from the underlying tissues and in order to do this he makes a small opening in the skin with a scalpel, and then, pushing the scalpel under the skin, he cuts the adhesions; in these cases he injects a solution of cocaine and adrenalin under the skin, which prevents the filling up of the space with blood and allows him to inject the paraffin mixture. Other cases require what he terms a "shaving off of prominent spots"; this consists of making a small opening in the skin and with a scalpel, removing some of the underlying tissue; if this is bony tissue he uses a chisel.

WERTHEIM'S TREATMENT OF CARCINOMA OF THE UTERUS.

One should visit the gynæcological clinic of Wertheim in order to fully appreciate the fair results that are obtainable in even well advanced cases of uterine carcinoma when operated upon by the Wertheim method. In this method an attempt is made to thoroughly clean out the whole pelvic glandular tissue in which metastatic growths have taken place. As you already know the operation and the technique, I shall not describe it, but simply add that the method is well thought of by the German gynæcologists. I have seen him remove very large uterine myxomas by the vaginal hysterectomy, the myxoma being removed in piece meal. Wherever possible the vaginal method of opening the peritoneal cavity is advocated, since the mortality rate is much lower. When this method is used the ovaries and tubes are pulled down by means of sharp-pointed hooks, and if the cyst is large it is pulled as far down with the hook as possible, and then punctured, and its contents allowed to escape per vagina, after which the cyst is ligated and removed. In the repair of incomplete perineal lacerations he not only removes a triangular portion of vaginal mucous membrane, but also removes a triangular portion of the skin at the base of the perinæum, so that you have two triangles with bases together.

THE SURGICAL TREATMENT OF EXOPHTHALMIC GOITRE.—Shepherd presents the histories of seventeen patients suffering from this disease, whom he has treated by removing part of the thyroid gland. He does not consider thyroidectomy indicated in all cases, but in properly selected ones the mortality should be low and a permanent cure result. In his opinion early operations are the safest and the class of cases most likely to benefit are not the most severe ones, but those in which the gland is more enlarged on one side than another, in which, in fact, there is a more definite tumor formation, in which the gland is not excessively vascular, and in which the enlargement has preceded the symptoms of Grave's disease by months and perhaps years. These might be called cases of secondary or acquired goitre. Also in those early cases of enlarged thyroid with a mild form of Grave's disease, in which the gland is soft, vascular and evenly enlarged throughout, here operations are usually most satisfactory, the after-results being decidedly good. The cases in which operation should be avoided are those of large vascular thyroids in which there are definite febrile exacerbations, excessive tachycardia, with acute dilatation of the heart, precordial distress, gastric and abdominal pain, vomiting and diarrhoea, sleeplessness, perspiration, sense of suffocation, great restlessness, œdema of the feet—in fact, all the symptoms of toxæmia due to thyroidism.—*Journal American Medical Association*, Sept. 1, 1906.

SOME OF THE MORE COMMON SKIN DISEASES: THEIR DIAGNOSIS AND TREATMENT.

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MR. President, Members and Guests of this Society: It is my pleasure at this time to present a paper upon some of the more common skin diseases. I shall not enter into histopathologic detail, nor shall I attempt to be ultra scientific; but shall limit myself mostly to diagnosis and treatment. I shall begin with a general consideration of diagnosis and treatment, and will then present in their order the following dermatoses, Scabies, Impetigo Contagiosa, Urticaria and Rhus Poisoning and its conjurers, Acute Vesicular Eczema and Erysipelas.

Let me begin then by stating that the majority of skin lesions are more or less difficult to diagnose, especially when one does not have the advantage of seeing large numbers of clinical cases. In order that we might be more enabled to correctly diagnose dermatologic affections, I shall mention a few of the factors which will be of assistance to us. Let us always remember that we can only hope to come to successful conclusions by the most careful observations, the closest scrutiny, and assuming always that our patients are often wont to play the part of consummate actors and actresses, frequently leading us far astray, so that we in turn must ever be alert, and in the words of one of our eminent dermatologists, "we must, with a gentle, courteous, and sympathizing manner, combine the art of a detective and the skill of a swordsman."

The question of light and heat in the examining room will be our first consideration. Under no circumstance is artificial light to be used, direct sun light is likewise to be avoided; for

they both give unnatural tints to the skin. Abundant day light then, is an essential factor in the proper examination of the diseased cutaneous surface. A temperature of about seventy degrees should be maintained, for above or below this point modifications of the color of the skin often take place. This is particularly so in the erythematous conditions, whether specific or simple in nature.

It is of paramount importance to make a complete and thorough examination of the entire cutaneous surface at the patient's first visit, for by the time of the second visit the eruption may have lost its characteristic appearance. The general color of the skin should be noted, it should as well be felt, so that its softness, harshness, or induration might be determined—whether it be dry or oily, etc.

Odors should always be noted, for they often assist us in a diagnosis. I refer especially to the mouse like odor of favus, the offensive odor in bromidrosis, the ammoniacal odor in uridrosis, and the characteristic odors in syphilis and small pox.

The age of the patient is always to be taken into consideration, for it is known that certain diseases occur at certain periods of life. One would hardly look for *tinea tonsurans* in an adult, or for psoriasis in an infant; acne seldom appears before puberty, and epithelioma usually about the fortieth year, yet it has been seen earlier.

The condition of the health is not to be overlooked, and this must be gone into thoroughly and concisely, because it is a recognized fact that many dermatoses are often secondary to some internal disturbance. Therefore it is quite essential that careful inquiry should be made into the state of the digestive tract, the genito-urinary tract, the bowels, the tongue and buccal membranes. In such conditions as general eczema, furunculosis, urticaria, and psoriasis it is of great importance to make a urinary examination. In fact this should be done in any extensive inflammatory condition; too much stress cannot be laid upon this point.

The patient's occupation should always be elicited, for we know that morocco, metal and chemical workers, cooks, dish washers, and scrub women are all prone to many varieties of dermatitis.

The question of duration naturally presents itself, and with this knowledge in hand we have indeed gained much towards a diagnosis. We must certainly know whether the condition

is acute or chronic, because it tells us much; take for instance impetigo contagiosa and eczema, which frequently simulate one another closely, if the duration has been for more than a week or two with no tendency to subside, it is probably eczema, if of one or two months' duration, it is decidedly so. Psoriasis and papulo-squamous syphiloderm may likewise be differentiated; if the eruption exist for more than several months, the diagnosis of syphilis becomes less probable, and if it has existed for more than a year, it is absolutely excluded.

Lastly, I should like to lay stress upon the magnifying glass as a most important factor in the diagnosis of cutaneous disease, for many a diagnosis has been made clear by its aid. One of the hand glasses, with a lense about three inches in diameter usually suffices. The presence of certain animal parasites and their ova, the distinctive diagnostic features and finer points which would otherwise escape unobserved, can thus be plainly brought into view.

I shall now take up the general consideration of treatment in skin affections, limiting the same to means entirely within the range of the general practitioner. Naturally, the first and most rational object in view would be, the removal of the cause; since many dermatoses are very frequently aggravated by internal or constitutional disturbances, it is quite natural that such disturbing factors should be remedied, ere one could possibly hope to cure or even improve a cutaneous disease. It is freely admitted by many authorities, that faulty metabolism, auto intestinal intoxication, lowered vitality, and neurotic disturbances are in part accountable for various dermatologic affections, and yet many ignore these facts and likewise ignore internal medication, relying entirely upon topical treatment to elicit a cure. I quote from Bulkley, "He but poorly serves his patient who prescribes only a local treatment, without going fully into the case and rectifying, as far as may be, the systemic errors which often play a most important part in the production and continuance of an eruption." I therefore wish to make a plea for more careful study of diseased cutaneous conditions, with the view of locating the cause, and for the constant administration of the properly indicated homœopathic remedy.

The question of diet is not to be ignored in the treatment of the diseased integument. That skin diseases are greatly benefited by an appropriate and properly regulated diet, is not to be

denied. Faulty digestion is very frequently responsible for skin eruptions, either directly or indirectly; so that it is of the utmost importance to regulate the diet. Food should always be proper in quality and quantity. Starches and sugars as a rule are to be avoided in the majority of dermatoses, for they tend to produce perverted metabolism and gastro-intestinal fermentation and according to Lassar, in a most excellent article on the Dietetic Treatment of Skin Diseases, in the *Dermatologische Zeitschrift*, No. 3, the excess of sugar in the tissues affords a fine culture media for pyogenic germs. The majority of the vegetables are not to be denied with probably the exception of potatoes, tomatoes, parsnips, and the heavier root vegetables. Among the permissible cereals might be mentioned rice, whole wheat and hominy; oatmeal with many patients seems to disagree, so that usually it is to be avoided. Plenty of pure cool water is desirable, to be taken between meals only, a glass full each hour, beginning an hour after meals and continuing up until an hour before the next meal—a cup of hot water sipped slowly, night and morning, is often of benefit. Meat and egg diets are to be regulated as the case may need, constantly bearing in mind that they are both often taken excessively, and are thus apt to produce imperfect nitrogenous metabolism. Such foods as oysters, clams, crabs, lobster, certain fish, pork, etc., and foods that are apt to deteriorate rapidly are to be avoided by susceptible individuals; true it is that many can take these foods without the slightest evidence of disagreement, and yet have severe attacks of urticaria. Often it is true idiosyncrasy to these or other foods, which is explanatory, but in such cases the effect is as a rule constant, and not occasional. Foods of too stimulating a nature, such as cheese, pastry, veal, spices, pickles, and excessive quantities of tea and coffee are not to be allowed. Cocoa and chocolate are likewise as a rule to be avoided, for in many instances they seem to interfere with the normal metabolic process. Milk is the ideal diet, and seems to agree best when taken on an empty stomach, at bodily temperature, sipped slowly, about an hour before meals. Bulkley contending that at this time the stomach is alkaline, and as the milk is alkaline, it is absorbed directly into the circulation. Too much stress then, cannot be laid upon the diet, let the rule then be, a proper diet both in quality and in quantity, at the proper time, eaten slowly, and masticated carefully, with little fluid.

The proper amount of rest, exercise and bathing, are all to be regulated as each individual case may seem to need, bearing in mind that bathing can very easily be overdone, and to many patients is quite harmful.

In conclusion of the general consideration of diagnosis and treatment I would like to state that of just as much importance as the elicitation of the cause, the internal and topical treatment, and the regulation of diet and hygiene, is the insistence upon the carrying out of directions and routine. Human nature is indeed at times peculiar and frivolous; at first while the patient is still imbued with the new order of things, and with the hope that they will soon be rid of an annoying dermatose, directions are faithfully carried out and the prescribed routine carefully followed and with good results, but alas! soon the enthusiasm begins to wear off, the interest begins to wane, and ere we are aware our patient is back in that same old rut, and then we wonder why results cease. To overcome just such tendencies on the part of our patients it behooves us to constantly question them closely on every detail, to question them definitely and to question them concisely, and by all means to see them often, for in this way and only in this way can one hope to have any measure of success. True it is, that the patient will squirm under such constant cross fire, will certainly try to evade the questions at stake, and would rather be left peacefully alone to follow the trend of his own likes and dislikes. Keeping everlastingly at them, then, is one of the keynotes to success in dermatologic practice.

We are now ready to take up the discussion of some of the more common skin diseases; scabies will be our first consideration. It is to be regretted that such a prevalent disease so frequently remains undiagnosed, and just as frequently remains uncured; patients traveling from one physician to another in search of relief, until finally they are driven to our dispensaries where they are quickly cured.

Scabies or the common itch at times is quite easy to diagnose, and yet again there are cases which are more or less difficult. I shall consider the lesions in their order as produced upon the hand, wrist, elbow, axillæ, and penis. While lesions are to be found upon the abdomen, buttocks, inner surface of thighs, legs and between the toes, in these locations they are not quite as characteristic, as those to be observed in the before mentioned regions; so that I shall limit myself to a dis-

cussion of these parts, with the hope of making the matter of diagnosis of this annoying dermatose somewhat clearer.

The predominant symptom of which the patient complains is the intense itching, always worse at night, due of course to the activity of the itch mite, the *Acarus Scabei*, which is a noctambular parasite. The disease usually develops in two or three weeks after nocturnal bodily contact with persons similarly infected, or by sleeping in bed clothes in which the parasite abounds. The disease as a rule is not contaminated by the mere shaking of hands, nor is it to be found upon the face and neck, except occasionally in infants, contracted from the mother's breast while nursing, which is a point well worth remembering. The female parasite itself may at times be discerned by lifting it out of its burrow with the aid of a fine pointed needle, appearing as a white shining globule, not much larger than the pin point itself. The parasite is to be found at the end of the cuniculus, which appears slightly raised with a grayish speck beneath, and may be examined beneath the microscope without staining, by simply immersing in a drop of Canada balsam. The chief characteristic of the eruption is the multiformity, consisting of vesicles, excoriated papules, pustules, scratch marks, and is frequently contaminated with impetigo, and eczema. Upon the hands and wrists the condition is decidedly characteristic, appearing especially between the fingers, as numerous vesicles and scratch marks. Here are to be found the burrows, especially on the lateral surfaces of the fingers. The burrow usually consists of a narrow grey line, tortuous in its course, usually varying in length from an eighth to a half an inch, often having a vesicle at its end or a slight greyish elevation, marking the site of the acarus. A hand magnifying glass, often assists in locating the burrow; Sabouraud offers the ingenious suggestion of applying ink to an infected region, especially in cleanly persons, on whom the parasite is hard to discern. The burrows are filled with ink by capillarity, the excess is wiped off, and leaves the burrows standing out quite prominently. It is to be remembered that scabies in this region attacks as well the palms of the hands. On the wrists, especially at the folds, on the flexor surfaces, may be seen typical lesions, vesicles, infected and non-infected, burrows running transversely, and numerous scratch marks. The bend of the elbow usually does not show burrows, but instead, first presents numerous scratch marks, followed later by sec-

ondary infection and vesiculation. Likewise at the axilla burrows as a rule are not to be seen, scratch marks here seem to be most predominant, usually at the anterior fold, on a line with the seams of the under garments. The penis is indeed a most favorite seat for the scabies lesions, both upon the shaft and glans of the organ, appearing as red papules and occasionally associated with vesicles and burrows. To recapitulate, the diagnostic features of scabies, are the presence of the burrow with its itch mite.

Intense itching, worse at night.

Absence of lesions on face and neck.

Occasional presence of lesions on face in nursing infants.

Presence of lesions about nipple in the female.

Presence of lesions upon the shaft and glans of the penis.

Characteristic lesions to be seen between the fingers, and at flexures of wrist.

With reference to the question of differential diagnosis, I should like to state that it is of utmost importance that an error should not be made, for the strenuous treatment needed in this condition would soon play havoc with some of the more acute dermatoses, with which it might be confounded. Eczema in its early stages is frequently seen on the hands and has been mistaken for scabies, in eczema the vesicles are not as conical in shape and are apt to be more closely associated; the discharge is of a more watery character, and does not tend to become sero purulent, except perhaps in the impetiginous forms. The eruptions of eczema, impetigo, and syphilis may co-exist, and greatly alter the true appearance. The chosen treatment, however, will in the course of a few days tend to relieve the scabies, or associated impetigo, while other conditions would be aggravated or not affected at all. If there is any one other condition which as a rule is diagnosed as scabies, especially in infants and children, it is the itching dermatose of Bateman. I refer to lichen urticatus or papular urticaria, which is usually to be seen during the earlier years of childhood. It differs from scabies, especially when upon the hands and wrists, in the fact that it begins as an urticaria, the lesions being rather small, and frequently decidedly papular in character. As a rule when the patient is brought to the physician the disease is usually well developed, making its diagnosis from scabies all the more difficult. In this well developed stage it presents rather pale red papules with scab-

bed tops, usually upon the hands and limbs, although the face and body are frequently the seats of lesions. Minute disseminated vesicles occur here and there with occasionally a pustule, infected by scratching, as the itching is intense. There is a tendency for the papules to become linear following one another closely, probably along the line of a scratch mark. As old lesions disappear they leave behind a dark spot, and frequently the older papules appear to be quite flat upon their surfaces, and if held at a proper angle with the light, they appear to be quite shiny. The duration at times is quite long, usually better in the winter time, only to recur when warm weather sets in again. The main points of differentiation from scabies are, the absence of burrows and the itch mite, absence of lesions on the penis, occasional presence here and there of weals, with an occasional antecedent history of urticaria; tendency of papules to become flat and shiny, recurs in summer time, itching usually worse in the day time, and is not rapidly responsive to treatment. Its resemblance to scabies is mostly in its appearance.

Treatment naturally resolves itself into three factors, namely, the removal of the cause, the relief of the associated dermatitis, and the increase of the resistance of the integument. The first factor resolves itself into the death of the parasite, this necessitates the use of an anti parasiticide, and sulphur happily is the specific. Not that sulphur should be used in every case, for there are sensitive and tender skins, especially in infants and children which cannot stand such strenuous treatment, in such cases, styrax may be used, care however must be taken, for if too freely used it has a tendency to irritate the kidneys. Sulphur on account of its odor is frequently objected to in private practice, so that naphthol may be used, which likewise has a tendency to irritate the kidneys, Croker, however, contends that he has never seen "any bad effects" follow its use. I shall give you the routine of treatment followed in the skin section in the dispensary of our own hospital here, and in the department of skin diseases in the dispensary of the West Philadelphia General Homœopathic Hospital. Firstly, the patient is advised that treatment will be useless unless all infected members of the family are likewise treated. The treatment is divided into five nights or periods, on the first night or period, the patient is advised to take a hot bath, entire or local, depending on the extent of the infection;

rubbing the body thoroughly with a mild soap if the skin is sensitive and tender, *sapo viridis* if the case is an old and chronic one. The object being to remove the epidermal layers, open the pores, and at the same time expose and destroy the burrows containing the parasite and its eggs. The patient is then directed to thoroughly rub in a 20% sulphur ointment, (Sulph. ppt. 20%. Base *Adipis rect.*) and to retire in an old suit of underwear. For three succeeding nights the patient continues to rub in the sulphur ointment, the hot bath as advised on the first night being omitted. Then on the fifth night another hot bath with thorough friction is taken, the underclothes and bed linen are boiled, while the cloth garments are either baked in the oven, or well ironed; on the next day the patient reports for further treatment, and is usually cured. If not, another course of treatment is prescribed, which usually suffices, yet at times three treatments have been required. There are two facts to be borne in mind, namely under treatment and over treatment, the former resulting in a non cure and the latter in complications, which however sometimes occur *pari passu* with the mildest of treatment.

I shall next consider these complications and how to meet them. Firstly it should be remembered that the itching does not always desist even when the parasite has been entirely destroyed, for in many cases the nerves remain irritated for a long time, the itching consequently persisting. Frequently hypochondriacs will disbelieve that they are cured, and will continue to itch; occasionally folliculitis of the thighs will result from too strenuous treatment with the sulphur ointment, and remains an annoyance for a long time. The latter condition is usually relieved with a few local applications of a dilute solution of *Liquor Carbonis detergens*. Secondary eczema and erythemas are usually controlled with a 10% Boric Acid Ointment, or *Lotio Calamine*. For the persistent itching without other complications, alkaline baths or any of the milder anti pruritics are advisable.

Lastly, I shall speak of the indicated remedy, because I do believe that the patient should have the benefit of its ameliorating properties and its tendency to assist in making conditions more favorable for a speedy cure, although this is purely a parasitic disease.

Sulphur. 6x. presents itself especially in those cases which tend to chronicity and recurrence, when the patient is thin and

weak and irritable, there are swollen glands, itching is marked and worse from warmth, marked burning and soreness from scratching.

Psorinum 6x. patients have aggravation before midnight from warmth of bed clothes, tendency to tear the skin with the finger nails, subjects are weak and fretful, offensive odor of cases which have been neglected.

Meroc. Vivus. 3x. Pustules form rapidly, with offensive secretions, patients are debilitated and cachectic, worse from exercise and at night, and from warmth of bed, better from rest and during the day.

Impetigo Contagiosa will next receive our attention; this one of the more common dermatoses is usually seen in children and infants, and occurs in adult life as well. The eruption is most usually seen upon the face and hands; yet any part of the body is apt to be infected. The disease has its beginning as small, flat discrete vesicles containing a serous fluid, which in the course of twenty-four hours, becomes pustular by secondary infection. Rupture soon occurs, followed by the exudate drying upon the skin as thin wafer like scabs which have a characteristic "stuck on appearance," and are yellow in color. These crusts seem to be very loosely attached, the edges tending to curl up and drop off, leaving behind a reddish exuding base. Very frequently nothing else is to be seen, a patient presenting a face covered with from fifteen to twenty such spots, the scabs having been removed by the patient, or having dropped off on their own account. The vesicular or vesiculopustular lesions, very frequently show a decided tendency to central depression or umbilication. The infection is a streptococcic one, the secondary suppuration resulting from staphylococcic infection, the disease therefore is highly infectious, often spreading with great rapidity among the inmates of orphanages and asylums. Itching is slight, and often wanting, in very severe forms there may be febrile disturbance; impetigo may likewise be seen affecting the conjunctiva, nostrils, and the commisural folds of the lips. The affection often undergoes spontaneous evolution, clearing up in about two weeks. Duhring has given the name of Impetigo Simplex to a form which differs from the type just described, in that the lesions do not appear as vesicles, but are primarily pustules, when fully distended they are globular in form, whitish yellow in color and about the size of a pea. They do not tend to

coalesce, nor umbilicate, this form is presumed to be non infectious. The diagnostic features of impetigo contagiosa then are, superficiality of lesions, discreteness, scabs are thin and stuck on, yellowish in color, edges have a tendency to curl up, and are auto-inoculable.

With reference to differential diagnosis it must be remembered that impetigo contagiosa in its early stages may be mistaken for varicella, this error, however, may be avoided by bearing in mind that the vesicles of varicella are usually more or less distributed over the entire body, and not being limited to the face as impetigo frequently is, there is an absence of coalescing and tendency to crust; it must also be borne in mind that impetigo contagiosa may co-exist with varicella; the vesicles becoming secondarily infected.

From the impetiginous form of eczema, impetigo contagiosa is often with difficulty diagnosed, as both conditions often simulate one another closely; Sabouraud contends that this form of eczema is merely an eczema which has become secondarily infected with streptococci.

Treatment demands the destruction of the infecting micro-organism, prevention of further auto infection, and the necessary internal medication to increase the resistance of the integument, and favor an earlier cure.

Unguentum Hydrarg. Amoniat. 10-20% rubbed thoroughly into the infected areas four times daily, gives the desired results. The scabs having previously been removed with warm water and soap. Washing the surrounding skin three times daily with any weak antiseptic will prevent further infection of the surrounding skin.

Among the internal remedies to be considered are:

Calcarea. Phos. 6x. Symptoms worse after coming in contact with water, in the late stages when there is a tendency not to heal.

Kali Bichrom. 3x. Aggravation from pressure and in hot water, better in cool weather and when co-existing with hepatic, rheumatic, urinary and catarrhal conditions.

Antimonium Crudum, 3x. Useful in peevish and fretful children, lesions are superficial, crusted, suppurative, lesions about mouth and nostrils, with painful cracks at the corners, tongue white and coated.

Antimonium Tartaricum 3x. Large, painful pustules, with heavy yellow crusts, there is numbness and itching.

Cicuta Virosa. 6x. When lesions tend to spread, children with neurotic tendencies, pea sized lesions on hands and face, becoming sero purulent and forming honey colored crusts.

Natrum Sulph. 3x. Pustules filled with yellowish fluid, which dry into yellowish crusts, children who live in damp cellars or rooms.

Picric Acid 6x. In debilitated children who tire easily, sero-purulent exudation which dries on face as thin semi-transparent scabs.

Viola Tricolor. 2x. Especially in scalp conditions, pustules on face and scalp; on scalp secretion is gum like, mats the hair, crusts have a tendency to crack, cases seen in winter, glandular swelling.

I shall now consider *Urticaria*. Let me begin by stating that it must always be borne in mind that all urticarias are not caused by dietetic errors; while this is the usual thought which flits through one's mind in seeking for a cause, it is to be remembered that medicinal substances are often a causation factor, among those to be mentioned are quinine, cubebs, copaiba, salicylic acid, morphine, turpentine, chloral, etc. Substances which produce toxæmia are often responsible for urticarial attacks; they may do so primarily or by putrefactive changes while in the bowel. Again it is to be remembered that many foods and substances which do no harm to the ordinary individual, will act as poisons to others. Worms in children will often cause an attack, genito urinary disorders, rheumatism, malaria, asthma and the eruptive fevers will all often be associated with an attack of urticaria. The gouty diathesis, fear and anger, in fact mental emotion of any type will frequently produce urticarial eruptions, so that it is of the utmost importance to look much farther than the mere question of an indiscretion in diet as an etiological factor. Dermographism, or the production of wheals upon the body surface by artificial means is not a true diagnostic factor of urticaria, for it is known that subjects of dermographism are not usually subjects of urticaria, other than that produced artificially.

The urticarial lesion usually appears suddenly, as firm pinkish or whitish elevations, surrounded by a red areola, and are known as wheals. There is marked stinging and itching, the size varying from a pea or bean to that of a large blotch. They are usually irregular in shape and often linear; any portion of the body is subject to attack, including the mucous membranes

of the mouth, nose and throat. Febrile disturbance may accompany an attack, occasionally reaching as high as 103 and 105 degrees. The disease may be acute, disappearing in the course of a few days, or may become chronic, often lasting for many years. There are many forms or varieties of this disease, among those to be mentioned are urticaria papulosa, tuberoso, hæmorrhagica, bullosa and gangrenosa. Pigmentary urticaria is not considered as a true urticaria by Sabouraud, contending that it is a decidedly papular disease.

Diagnosis as a rule is not difficult, frequently the patient will announce the ailment of his own accord. Erysipelas of the face may at times be somewhat confusing; there is more marked redness, constitutional disturbance is greater, there is usually a line of demarcation, the swelling is more diffuse, there is a tendency to vesiculation, and the duration is longer.

It is not to be forgotten that the *Cimex Lectularius* has more than once been the cause of a supposed attack of urticaria, it is always well to have the bed clothing looked over, especially when the lesions are found in groups of three or four; a central point is at times to be seen, marking the point of the insect bite.

Treatment demands that the cause, whatever it may be, should be persistently sought for. If due to an error in diet, and the case has been seen early, an emetic is needed to empty the stomach of any irritating substances. The bowels are likewise to be emptied, the indicated remedy is to be given, and to control the intense itching, a one or two per cent. carbolated or mentholated vaseline may be used. Alkaline baths likewise are of service. It is often a mistake to put urticarial patients upon a milk diet, for the fact that all patients cannot tolerate it, toxic products of indigestion often resulting from its use.

Probably the most called for remedy is *Apis* (3x), it is especially indicated when the symptoms are worse from heat, the sensations are more of a stinging nature than itching, there are burning pains, and the tendency is to form blotches.

Rhus Tox. 6x. Patients are better when they move about, the sensations are more itching in character and are relieved by cold; there is marked swelling of the skin, often associated rheumatic pains, attacks occur after exposure to wet and cold.

Urtica Urens, 3x. When due to shell fish or some food for which there is an idiosyncrasy.

Hepar Sulph. 3x. Especially useful in chronic cases, there

is sensitiveness to cold air and sharp sticking pains, great sensitiveness of the lesions. Among other remedies to be considered are *Ledum*, *Aconite*, *Bryonia*, *Opium*, *Rumex*, *Sulphur*, *Terebinth*, *Dulcamara*, etc.

I shall lastly speak of poisoning due to the several plants of the *rhus* species, so common to our own country. The symptoms usually develop a few days after contact, occasionally in a few hours, and then again a week will elapse ere manifestations will present themselves. The fingers and hands are usually the first to be affected, soon spreading to the arms and face and frequently involving the genitals and nates. An erythema may be the first manifestation, with more or less swelling; there is intense itching, which is soon followed by a vesicular eruption. Bullous lesions may coexist, often denuding large areas of the skin, leaving a raw, inflamed surface. The disease will, as a rule, run its course in about two weeks; yet there are obstinate cases which defy treatment for a long time, these forms are often followed by and have associated with them an acute eczema. Secondary attacks at times occur; the patient having all the symptoms of the original attack, without re-exposure. Croker accounts for these secondary attacks by the remainder beneath the skin, of small whitish deposits at the time of subsidence of the original attack. Maisch, of our own city, holds toxicodendric acid, the poisonous principle, of the *rhus* species, responsible for this disease, while E. H. Smith, of Santa Clara, California, holds a germ responsible.

A differential diagnosis between *rhus* poison, acute vesicular eczema and erysipelas is indeed at times quite difficult. The history of exposure, the distribution of the eruption, and the regions affected, are always to be considered. In eczema, as a rule, the vesicles are smaller than in *rhus* poisoning; for in this condition they are larger and usually associated with many blebs, and at the same time there is a tendency of the vesicles to appear in linear streaks. Erysipelas, beginning at a point, spreads itself peripherally, with a well defined border; the inflammation is deeper seated, involving the subcutaneous tissues as well. The sensations in erysipelas are those of fullness and burning rather than itching. The character of the discharging fluid is quite different from either that of acute eczema or *rhus* poison, being more serous than watery; there are as well constitutional disturbances and fever.

With reference to treatment it would seem quite rational that the proper thing to do, would be to neutralize the acid poisonous principle which is presumed to be the cause of the disease. This is usually accomplished by the use of a solution of Sodium Hyposulphite; yet Hyde and Montgomery cannot see how such a procedure would tend to do good, as they contend that "it is difficult to understand how such neutralization can control the inflammatory process after its onset"; they further contend that alkaline solutions should only be considered with a view of prophylaxis.

In the *Pacific Medical Journal* for March, Dr. E. S. McKee recites his own personal experiences as a sufferer from rhus poison; after trying many remedies he found most relief in a solution of 53% alcohol, 47% distilled water and sufficient lead acetate to make a saturated solution. The Doctor found relief from this solution within eight hours, and states that if he were poisoned again, he would wash the parts with a dilute solution of alcohol, to dissolve and remove the poison. At the West Philadelphia General Homœopathic Hospital, Dr. Hyzer, the resident physician, and myself treated a series of cases this summer with Dr. McKee's solution, a saturated solution of sodium hyposulphite, and Duhring's solution of Grindelia Robusta fluidum, (one drachm to four ounces of water). All three solutions were kept constantly applied on different affected parts of the same individual. Our conclusions were that Dr. McKee's solution was ideal in the very early cases, a day or two old, this same solution doing no better than the other solutions, in the older cases. Just as good results were obtained from the saturated solution of sodium hyposulphite as from the solution of grindelia robusta.

The larger blebs and vesicles should be opened and the contents gently pressed out, care being taken not to destroy the covering. Once a day the infected parts should be cleansed with warm water, the part lightly dried, and treatment resumed.

Internal medication is not to be neglected.

Croton Tig. 6x. The vesicles are very small and itch terribly, with a tendency to form pustules, which dry into yellow scabs, the vesicles tend to become confluent.

Cantharis 3x. The sensations are rather those of smarting and sticking than itching, worse from warmth and at night, better from cool applications.

Rhus Tox. 6x. Sensations are itching and burning, marked tendency to spread, worse from cold and wet weather, at night and from light scratching, better while moving about.

In the preparation of this paper the writings of the following authors have been freely consulted: Dearborn, Lassar, Mracek, Duhring, Sabouraud, Croker, Hyde, Montgomery, Bulkley, Shoemaker, Stelwagon and Jacobi.

THE RADICAL CURE OF INGUINAL HERNIA.

BY

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THE first operations for the cure of inguinal hernia consisted of simple ligature and removal of the sac, and were popularized by Socin. Needless to say relapses were numerous, not only because of the faulty technique, but also because of frequent suppurating wounds. In 1877 Czerney introduced his method of ligature of the sac at a point as high as possible, and closure of the external ring with sutures. The mortality of this operation is stated at 7% and relapses at 30 to 40%. The method was adopted in slightly modified forms by such men as Ridel, Banks, Barker, Championnière and McCormac, and universally practiced for the next ten years.

In 1886 Macewen published his method, which consists of infolding of the sac by means of a purse string suture so as to form a pad just within the internal ring, and careful closure of the canal by a special manner of suture. In the hands of the originator, the operation was very successful. In 164 cases there were two deaths and in 107 of those that were traced, there were but five relapses; a marked improvement over the Czerney method. Other surgeons have not had as good results, and it would seem that the success of the method does not depend so much upon the use of the sac as a pad to plug the internal ring, as it does upon the careful closure of the canal, a step which requires skill and much practice for its proper performance.

McBurney in 1888, attempted to make use of the well-

known contracting power of scar tissue to close the canal and rings. His method consists of slitting up the canal, ligating the sac high up and leaving the wound open to heal by granulation. The results have not been at all good, relapses are frequent and the method has been practically abandoned.

The sac has been used as a plug or pad in several other ways than the Macewen method. Ball practices torsion of the sac and suture in the canal. Kocher (1892) twists the sac, brings it out through a small incision in the external oblique above the internal ring, lays it on the aponeurosis over the canal and sutures it down. Sloughing of the sac and imperfect wound healing not infrequently follow this method. Treves has modified Kocher's method by cutting away the sac after bringing it out through the aponeurosis, which does away with the danger of sloughing; Kocher has adopted this modification.

It was in 1888 that Bassini introduced his method, although the first operations were done in 1885. The method consists of slitting up the aponeurosis of the external oblique; high ligation of the sac; transplantation of the cord; suture of the internal oblique and transversalis to the shelving portion of Poupart's ligament, the cord being held up out of the way and finally, suture of the split aponeurosis over the cord. Bassini's method has proved to be, in the hands of surgeons generally, the most successful method for the cure of inguinal hernia. The present mortality, excluding strangulated hernia, is 9-10 of 1%. In Carle's clinic in Italy relapses after the Bassini operation in 1,120 cases were only 2.16 %. Many modifications have been introduced by different surgeons, but the principle has remained the same.

In 1890 Halsted introduced a method which has given good results, but not equal to that of Bassini. Halsted resects the veins of the cord so as to lessen the diameter of the cord, and also because he says they are always enlarged. He then incises the internal oblique and transversalis muscles above the internal ring, and pulls the cord out through this incision. He then approximates all the muscles, including the aponeurosis of the external oblique, under the cord, with mattress sutures, obliterating the rings and canal and leaving the cord on top of the aponeurosis, covered only by skin and subcutaneous tissues. Halsted published a list of 440 cases operated by this method with one death. Relapses were from 4.3% in clean cases to 22% in suppurated cases. Atrophy of the testicle is

not unusual after the Halsted method. In a list of 129 cases cited by O'Conner there was atrophy of the testicle in 20%. The practice of incising the deeper muscles is one of doubtful value and the majority of American surgeons do not approve of it. Halsted himself, in 1901, stated that he had abandoned it. The Halsted method has been so extensively modified by the originator and his assistants that at present nothing remains of the original operation except the resection of the veins and the "mattress sutures." As it stands to-day the operation consists of:

First. The cord is *not* transplanted, but is pushed down into the deeper structures and emerges at the site of the external ring (see Fowler's method).

Second. The veins of the cord are excised, but the vas is not lifted up or handled for fear of producing thrombosis of its veins.

Third. The cremaster muscle and its fascia, previously divided, is drawn up *under* the mobilized internal oblique by fine silk sutures.

Fourth. The free edge of the internal oblique is sutured to the shelving portion of Poupart's ligament.

Fifth. The aponeurosis of the external oblique is overlapped after the Andrews-Halsted method.

The results of this operation are superior to Halsted's former method.

Where the hernial opening is large and the conjoined tendon is atrophied, Halsted uses a flap of the anterior sheath of the rectus muscle reflected outwards and downwards and sutured to the under surface of Poupart's ligament. Bloodgood splits the outer margin of the rectus sheath from the pubic insertion upwards for two inches, this allows the rectus muscle to bulge from the cut and it is sutured to Poupart's ligament. In cases where the internal oblique shows too great tension after suture, relaxation incisions can be made in the sheath of the rectus to relieve it. All these steps can be applied to the Bassini operation.

Some years after Halsted introduced his method, Fowler suggested that the sac be cut away at the internal ring and the finger introduced into the peritoneal cavity back of the inguinal canal. The surgeon then cuts through the transversalis fascia and peritoneum on his finger as a guide, the deep epigastric vessels being secured and cut between ligatures. This leaves a

large opening into the peritoneal cavity into which the cord is dropped and the opening closed layer by layer, as any other abdominal wound would be. Fowler's method is said to give a very strong scar, obliterates the internal ring and the canal, the external ring being extended into the peritoneal cavity for the passage of the cord. Its disadvantages are that the cord is left lying within the peritoneal cavity, and if it should become inflamed or infected, would convey the infection to the peritoneum. Again, the deep epigastric vessels are needlessly sacrificed, which seems to us to be poor surgery. The operation, however, has a good field in relapsed cases. Fowler also has practiced a method in small hernias occurring in children and young adults, which has gained considerable popularity. It consists practically of following the principle of the Bassini method without, however, transplanting the cord. The internal oblique is sutured to Poupart's ligament by one row of sutures, the cord being simply pushed down into the deeper structures and the aponeurosis of the external oblique is united by a second row. Fowler claims that by this method the sphincter-like action of the arciform fibres of the internal oblique and transversalis are conserved. In the Bassini operation the sphincter-like action is destroyed. Hence the latter operation, according to Fowler, should be reversed for hernias that have been in existence for many years and in which the muscular fibres have been thinned and separated by prolonged stretching or truss pressure.

The main factors for success in any operation for hernia are :

First. Ligature of the sac as high as possible to overcome dimpling or bulging of the peritoneum at the site of the internal ring.

Second. Accurate suture of the canal with a suitable material.

Third. Perfect wound healing.

It has been repeatedly shown that the percentage of relapses is much less in those cases where the wound has healed by first intention than in those where suppuration has occurred. Suppuration does not necessarily mean infection. The prevention of the entrance of germs into the wound at the time of operation or subsequent is not the only factor to be considered in that much-desired act of perfect healing. All unnecessary handling and mauling of tissues should be religiously avoided, the sac separated by blunt dissection with fingers and the judi-

cious use of the scissors, the cord carefully handled and not constricted too much by the sutures, and above all, perfect hæmostasis obtained in all portions of the wound without the inclusion of large masses in the ligatures. Scudder recommends that the sac be opened, cut across at the level of the external ring and the upper portion only removed after suturing at the neck. The lower portion, that which extends down into the scrotum in complete hernia, is left undisturbed. He has never seen a hydrocele or a cyst develop in it.

The operation should be performed as rapidly as possible and the surgeon who sticks to one method will obtain the best results because here, as in other fields, dexterity and rapidity can only be obtained by doing the same thing over and over again. The question of drainage is an important one, but drainage should not be overdone. The rule should be to close the wound without drainage. Where a large sac as in an old hernia, has been removed, or, where there is undue oozing, or the patient not in good physical condition or too fat, a small drain should be inserted at the lower angle of the wound, or through a separate stab wound in the scrotum. For drainage material we have found a folded strip of rubber dam more satisfactory than gauze or the cigarette drain. For superficial drainage we make use of the small silver wire drains so extensively used at the Massachusetts Homœopathic Hospital. A spica bandage is applied in all our cases and in order to make the pressure it exerts effective, all the time, a ham split is used for the first twenty-four to thirty-six hours as suggested by Scudder.

Next in importance to a correct operative technique in securing a good result, is the question of rest following the operation. A stay in bed in the recumbent position for from three to five weeks is quite essential. Many a case has been spoiled by getting about too soon, before healing has reached the point where the scar could withstand the severe intra abdominal pressure brought to bear against it by the assumption of the erect position. We also do not approve of the wearing of a truss or pad subsequent to the operation, except under special conditions. We prefer to have our patients wear a snug spica bandage for two or three weeks after getting about, then discontinue all support. We believe also we have seen good results follow massage of the abdominal muscles when they have been thin and weak. If possible, the patient should make use of a low

inclined water-closet seat when having the bowels moved, so that the inguinal region is reinforced by the support given to it by the anterior surface of the thighs pressing against the lower abdomen. For a period of three months following the operation, there should be no hard manual labor.

There are a few important points in the technique of the Bassini as practiced by us to which we want to call especial attention. After the sac has been ligatured or sutured at a point as high up as possible, the ends of the ligatures are left long and threaded on large full curved Hagedorn needles. Under the guidance of the fingers the needles are passed *under* the internal oblique and transversalis muscles and *outside* of the peritoneum and transversalis fascia to a point well above the internal ring and towards the median line. Here the needles are made to pierce all the abdominal muscles, about one-quarter or one-eighth of an inch apart; the skin and fat being held aside and the threads pulled taut and tied. This draws the stump of the sac away from the weak spot, i. e. the internal ring, and places it against strong muscular and aponeurotic structures. The liability of relapse is thereby lessened. We notice that this step in the operation has been adopted by Halsted and his assistants in the description of what they have termed the "Johns Hopkins operation" for hernia. This modification of the usual technique was first introduced by William B. Van-Lennep and, under the name of the "Hahnemann Hospital Method," has been in routine use in that institution for the last ten or twelve years. We look upon it as a very important step in any operation for the cure of hernia.

Another point to be remembered in following out the Bassini method is to introduce one or two sutures *above* the internal ring, joining the internal oblique to the under portion of Poupart's ligament. These sutures were not in the original operation, but have since been added, because they have been found to further constrict the aperture of the ring and support what is naturally a weak spot. Lastly, in suturing the aponeurosis we make use of a continued suture of chromicized catgut, beginning above and working down until the external ring is reconstructed to the desired size. The suture is then made to transverse back to the starting point, being applied very much as one puts in a Cushing right-angled intestinal suture. It turns in a fold of aponeurosis, bringing broader surfaces in contact and completely buries the first line of sutures.

Since last October I have operated twenty-four cases of inguinal hernia, all after the method of Bassini as just described. The results have all been primarily good in each instance, although it is too early yet to claim permanent cures. In all my cases the suture material has been No. 1 chromicized catgut. Four of these cases presented features out of the ordinary sufficient to warrant their being briefly presented. It may be of interest to state that we have been impressed by the frequency of the congenital type of hernia. We are inclined to the belief that the majority of hernias are of the congenital type, or at least that there is a congenital defect in the development of the inguinal canal in the form of a peritoneal tube of varying length and width extending into the canal from the opening of the internal ring, which, in the developed hernia, forms a sac. There is only needed an extra strain brought to bear against this weak spot, or a further weakening of the abdominal muscles to allow a loop of gut to pass out. Sixteen of our twenty-four cases showed the signs of congenital hernia. Let me refer those who are interested in this subject to an excellent article by Russell in the London *Lancet* for March 12, 1904.

Case 1, J. M., male, colored, 59 years of age. A right inguinal hernia appeared at about the age of twenty years, after some heavy lifting. In spite of a truss the hernia had escaped on several occasions and given trouble. Three days before the hernia came down, and could not be reduced. Bowels moved until day before operation; no vomiting or nausea. Operation Hahnemann Hospital, April 13, 1906. Ether anæsthesia. Hernia was of congenital type, the cæcum forming part of the neck of the sac. The latter was filled with blood-stained fluid; containing small intestine (lower ileum); no adhesions. A tumor, the size of a hen's egg was attached to a loop of the gut about five inches from the ileo-cæcal junction; a smaller nodule two or three inches further away. This growth prevented the reduction of the hernia. As the bowel was somewhat damaged, although not distinctly gangrenous, six inches of the gut, including the tumor were resected and the ends joined by a Murphy button. The Bassini operation was then carried out. The patient did well and the button was recovered in a little over five weeks. Drs. Sappington and Elliott reported the tumor to be a Myxo-fibroma.

Case 2, L. W., female, 43 years of age. Complete left in-

guinal hernia since fifteen years of age. Operation Hahne-
mann Hospital, October 13, 1905. Morphia-Scopolamine—
Ether anæsthesia. Sac containing small intestine which was
recognized as being the ileum. A medium sized Meckel's
diverticulum was found springing from the free border of
the intestine, tapering down and ending in a fibrous band which
was attached to the interior of the sac. It was removed and
Bassini's operation performed with a good result.

Case 3, J. L., male, 43 years of age. Left bubonocoele of
several years standing. Is increasing in size, but does not
extend into the scrotum. Operation Hahnemann Hospital,
April 13, 1906. The bubonocoele proved to be a hernia of the
urinary bladder, bulging outward at the site of the external
ring. The deep muscles were wanting altogether at this point.
The diagnosis was verified by the passage of a sound. To the
outer side and above the bladder was found a small, empty,
hernial sac. This was removed, the bladder pushed back and
Bassini's method carried out with satisfactory results.

Case 4, J. L., male, 13 years of age. Right oblique inguinal
hernia. Operation, West Philadelphia Homœopathic Hospi-
tal, May 11, 1906. External ring filled with fluctuating ir-
reducible mass, size of a lemon. Usual incision showed this
to be the hernial sac, distended with about two ounces of
straw-colored fluid. The sac extended down to the testicle
which, however, was provided with a well-formed tunica va-
ginalis. The neck of the sac was very large, admitting two
fingers with ease. The tip of the appendix congested and stiff,
presented into the sac, and was easily drawn out, bringing the
cæcum into view. The head of the latter was then seen to
form a part of the upper portion of the sac. The appendix
was removed, the cæcum separated from the sac and the open-
ing into the peritoneal cavity closed by suture. Bassini opera-
tion was then performed with perfectly satisfactory result.

References: Scudder, *Annals of Surgery*, January, 1905;
Johns Hopkins Hospital Bulletin, August, 1903; Fowler, *A
Treatise on Surgery*; International Text Book of Surgery;
Binnie, *Operative Surgery*; Kocher, *Text Book of Operative
Surgery*.

BILIARY LITHIASIS—CHOLEDOCHOSTOMY.

BY

DESIDERIO ROMAN, A. M., M. D.

(Read before the Homœopathic Medical Society of the State of Pennsylvania.)

IN the history of clinical medicine, every organ and function have been taken into account and studied; the evolution of clinical pathology is but a series of periods during which the diseases affecting a certain organ, or a function, commanded more or less attention and recognition in medical minds. In the long road of medical achievements we observe that the pathology of certain organs, that is to say, that a certain disease in a certain organ or in its function, has called forth greater attention and study than other contemporary diseases; the popularity of such a disease and its study lived for more or less time until a new suggestion, a discovery, or research, would direct attention to a newer field of thought. Diseases have therefore undergone the natural course of history; they have claimed periods of especial recognition, have passed into temporary oblivion, and again been brought back into notice by further study, by their own manifestation under light of better recognition, and fathomed to a deeper level.

That has been the course pursued by medical progress from its earliest history to the present day.

The pathology of biliary lithiasis is ancient in principle; it has endured the search of all possible theories, and in its present conception it reveals but very little change from the original promulgations.

The catarrhal origin of biliary calculus is the corner stone laid down long ago of the present structure which we now accept; the bacterial element in the formation of gall stones, a contribution of our present day studies, while admitted as a possible factor, does not endure the test as a constant etiologic power in the initial formation of biliary concretions.

The object of this paper is a practical one; it does not deal with the recitation of theories and statistical figures to draw conclusions from, it does not take up the analysis of opinions upon the subject, all of which you can find to your satisfaction in books and journals; but it is my desire to present to you the practical points from personal experience which clamor for urgent attention on the part of the general practitioner.

The development of biliary sediment and biliary calculi is not an acute process—never. It is always the result of a chronic condition, for gall stones are results and not primary formations, in a long course of functional and structural changes. While bile sedimentation and concretions can and do form anywhere in the bile channels, for practical value we must assume that gall stones have their origin in the gall bladder and that a catarrhal condition in the mucosa of the gall bladder precedes the development of the calculi.

Suffice it to say that the experiments conducted by Naunyn and others have established that alterations in the mucosa of the gall bladder, that is, a simple catarrhal process, a cholecystitis, furnishes the albumenoid material, and epithelial exfoliation, which is the nucleus for the congregation of the chemical elements, the bile salts, thus, layer after layer, result in the completion of a stone. The theories in regard to the formation of the bile salts right there in the local changes, and as a product of the altered mucous membrane, are not sufficiently satisfactory for unanimity of opinion; and therefore, dispensing for practical purposes with the true origin of these salts, we recognize in the composition of the various forms of biliary calculi, mainly the calcium-bilirubin, the cholesterin, the pigmentary, calcium carbonate, and the various combinations of these elements.

Experiments have shown that bacterial infection into the gall bladder, or any irritation artificially produced sufficient to set up a catarrh of the gall bladder leads to the formation of gall stones. The presence of the bacilli coli-communis and the typhoid bacillus in gall stones at once proves first, their share in the development of such stones, and second, the invasion of the bile channels from the intestinal canal. An irritation therefore, reaching the gall bladder either by the way of the liver through changes in the character of the bile, or ascending from the intestinal tract, is likely to lead to cholecystitis and gall stones; it follows then that this intrinsic condition is dependent upon extrinsic causes.

It is precisely upon this point that the prime object of this paper is centered, namely, to bring out the outside sources which our daily experience on the operating table prove to be the invariable sources of a surgical condition which might well be avoided by the proper medical prophylaxis.

In eleven cases of obstruction in the cystic and common bile

ducts which I have operated within the last year, the clinical history in all was that of the every day "gastralgia, chronic indigestion, dyspepsia and bilious spells," which the general practitioner is daily prescribing for. After a few years of these chronic complaints, to which both patient and doctor grow indifferent, suddenly an acute illness, with alarming symptoms, such as violent pain and vomiting, more or less icterus or none, a localized tenderness, and a few other unremitting and distressing signs—the patient is hastened to the operating table, and the diagnosis made clear by the delivery of one or more gall stones. That in eleven cases within a year obstruction should be met with in the common duct, suggests the frequency now-a-days of biliary lithiasis, or at least that sharper observation leads to its frequent recognition; and in view of the fact that operative interference for disturbances in the gall bladder and biliary ducts are demonstrating from day to day and case to case associated conditions in the liver and pancreas as the result of irritation from gall stones, we are confronted with a series of morbid changes of paramount importance, and of such serious consequences that it is the duty of the general practitioner to question those conditions, heretofore regarded as of little moment, as the possible stepping stones to serious consequences, and thus regard a few attacks of indigestion in the individual as a forerunner of graver pathology in the liver, gall bladder and pancreas.

In this country, in a general way, we are wont to regard carcinoma of the stomach as a disease beyond help. When a case of carcinoma of the stomach comes to the notice of the surgeon it is, as a rule, past any lasting aid; the German clinicians, however, who indulge in finer scrutiny of their patients, frequently diagnose carcinoma of the stomach, and surgical intervention with them, at an early stage, has yielded an encouraging percentage of good results.

I speak of this to again emphasize the necessity for closer observation of our patients in every day practice, and that for the general practitioner a combination of both careful observation and *pessimism*, that is, assuming the worst possibilities first, until eliminated by exclusion, will bring us to the only rational way of practicing medicine, the prophylactic ideals which would place medicine on a more scientific basis.

The teaching points or morals, if you please, in these eleven cases, which I beg to bring to your notice, can be summarized as follows:

First, that biliary lithiasis is prevalent in the age of maturity, during the years of great activity between thirty and sixty, if I may be pardoned for digressing from the age of Osler.

Second, that gall stones are more frequently met with in women than in men, a fact which may be explained by their more sedentary habits, tendency to obesity, and the systemic metabolism of pregnancy, for I have frequently observed the development of gall stones in women after their first confinement.

Third, that in nine out of these eleven cases, empyema of the gall bladder was met with, and that in such cases bacteria were undoubtedly instrumental in the phenomena.

Fourth, that in the operative procedure for the relief of gall stones, it does not suffice to open up and drain the gall bladder as the sole relief of the condition, but that, in every case, a careful and systematic search must be made for possible obstruction in the three main ducts, the cystic, the hepatic, and the common choledochus; for the obstructions in the ducts, particularly in the cystic duct, are accompanied by sacculation of the duct wall which does not permit, and consequently does not warrant the assurance of subsequent escape of the stone by the established drainage of the gall bladder.

The operation for the relief of obstruction in the ducts by choledochostomy is usually a simple procedure; the drainage of the duct, like the drainage of the gall bladder, has been, in my experience at least, uniformly successful, and it does not add any greater severity to the operative interference, even when time was taken in two of these eleven instances to suture the opening in the common bile duct.

Bearing in mind then the facility with which biliary lithiasis can and does develop, and the prevalence in our present civilization of the various contributing causes for the same, it is high time to initiate a crusade against the formation of concretions in the biliary channels, not alone by reason of their direct local harm, but by their consequential influence of a graver nature, such as secondary pancreatitis and secondary carcinoma of the gall bladder and liver. William J. Mayo is of the opinion, from large experience, that the gall bladder is infected through the bile in the vast majority of cases, and less so from the intestinal tract, especially in the more serious grades of infection, and often when no stones are present. In 90% of the cases of common duct disease, says this authority, "the infection comes from the bile and gall bladder in the etiology of

these infections." Of such a degree of importance is the valuation of the commonly called dyspeptic complaints, that an error in diagnosis is by far a safer mistake than the failure to recognize well developed lesions; as B. Farquhar Curtis says: Without reference to more important results, it is the general feeling of those with experience in the surgery of cholelithiasis that in the latent cases, that while the patient does not present symptoms pointing directly to the biliary system, they are afflicted with various dyspeptic complaints, and that the latter can be relieved or permanently cured by operation.

In conclusion, I desire to plead—

First, in the sense that the recognition of the early signs leading to the development of cholelithiasis offer no special difficulties nor require extraordinary acuity of observation.

Second, that it is our duty to act promptly with prophylactic measures, and

Third, that the operative interference in the well established cases must be undertaken at the earliest possibility, to minimize complications, for the surgery of the gall bladder and bile ducts is not only comparatively speaking of very little danger, but remarkably successful.

ACUTE GONORRHOEA IN THE FEMALE.

BY D. B. JAMES, M. D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania.)

CONSERVATIVE statistics estimate that 55 per cent of operations performed in the female pelvis, are the direct results of infection by the gonococcus of Neisser; that it causes 80 per cent. of all deaths from inflammatory diseases peculiar to women; that it is accountable for nearly all cases of pus tubes; and that over 75 per cent. of all suppurative inflammations in the pelvis are due to its ravages.

With these appalling figures before us it is imperative that we, as specialists or general practitioners, must accept a great responsibility when an attack of gonorrhœa presents itself for treatment.

It is far more important to be able to successfully handle these cases in the acute or semi-acute state, or before the infection has progressed upward and destructive changes have taken

place in the uterus and its adenexia, than to be able to perform the various operations of salpingo-oophorectomy, or total extirpation, that are necessary in a large proportion of these cases.

Unfortunately for the individual and the reputation of the physician these cases often reach us after they have been infected higher up in the genital tract, and are in a chronic state, or that they have begun as a chronic case.

A large per cent. of these cases could, if properly treated from the beginning of the attack, be prevented from the choice of a life of semi-invalidism, or of an operation.

While it is true that some of the cases are illy treated by the physician, by far the greater number, progress through neglect, ignorance or the home treatment.

Cases of gonorrhœa should be divided into two general classes. 1st, those that have not attempted to treat themselves or been treated, and 2nd, those that have treated themselves or have been treated by a physician.

I consider this division necessary to form a prognosis of the case and for therapeutic value.

In the first class I believe we can attain the best results, for the chances are in favor of the disease, under treatment becoming localized.

In the second class I give a guarded prognosis.

The second class should be sub-divided into two classes, 1st, the innocent or one ignorant of her condition; 2nd, those that have reason to suspect infection, and desire to keep their own counsel.

The symptoms of the disease may be so mild as not to inconvenience the patient, or the newly married woman thinking the symptoms a natural sequence of the marital relations allows the disease to progress unknowingly.

The suspecting one attempts to treat herself under advice of a friend, and thereby hastens the progress, and infects herself higher up, ignorantly.

In these cases of innocence, the greatest harm I believe arises through the womens' best friend, which proves to be her worst enemy; the douche.

The bride, desiring not to conceive, uses it, the sufferer of a mild attack of leucorrhœa, uses it, the suspecting one uses it, and in consequence, a local infection in the majority of cases is aided in its ravages and infects the whole genital tract, and

may even enter the circulatory system or may threaten the life of the patient.

It has been estimated that 37.5 per cent. of cases are already infected about the cervix when first presenting themselves for examination.

With these figures I fully agree, but I also believe that the majority of cases begin as an acute infection about the vulva, and if allowed to remain there would not progress further.

A certain number of cases, no doubt are infected higher up from the beginning, but this proportion I believe to be low.

Particularly do I believe this to be true in the multipara or where there is no laceration of the cervix or ectropia of the lips.

The symptoms of an acute attack of gonorrhœa are the symptoms of an attack of vulvitis, plus urithritis, and as before stated, may be very mild or they may be very severe.

The cardinal symptoms are dysurea, burning sensation about the vulva, associated with itching and a sense of fulness. There is also a purulent discharge bathing the lips and sometimes running down the thighs.

A case presenting such symptoms should then be questioned as to what has been done in the way of treatment, and if no attempt has been made, and the parts have not been handled, the case should be treated as a gonorrhœa vulvitis, provided the objective symptoms confirm the suspicion.

The objective symptoms are: localized swelling—or a general swelling—and œdema of the whole vulva extending upward and often involving the prepuce, which becomes œdematous and the clitoris semierectile, from engorgement of the erectile tissue. The whole vulva is bathed in a discharge and may show areas of denudation.

Upon carefully separating the lips there will be seen a pouting of the urethra and at either side of the meatus will be found a red punctate area, Skenes ducts. Below where the labia majora and labia minora merge will be found two similar areas, Bartholin's glands. These four areas are sometimes called the four gonorrhœa macules, and will persist a long time after the case has apparently cleared up.

If one is still not satisfied that the case is one of gonorrhœa, a platinum wire may collect some of the discharge that will be found in the urethra and submit it to the microscope. This latter method I rarely consider necessary, if the other symp-

toms are present. If we will recall the histological anatomy of these infected areas, we will remember that they are all lined with a cylindrical epithelium.

The vulva itself is covered with the same type of epithelium as the skin; squamous.

In the vagina we again find a squamous epithelium of the same variety that covers the skin, minus the characteristics of the skin, hair and hair follicles, and sweat glands.

The essentials of the treatment then should be to limit the infection to the areas about the vulva that are lined with the cylindrical epithelium, if the germ has not already passed the barrier, formed by the squamous epithelium of the vagina.

The gonococcus may be considered a surface germ, or one that does not tend to burrow deeply, and shows a predilection for cylindrical epithelium and will not survive long the acid secretions that are found in the vagina.

As we are dealing with a foe that will conquer us unless we, from the beginning obtain the upper hand, it is essential that we impress upon our patient the importance of co-operative treatment, and the necessity of carrying out instruction thoroughly.

As essential as it is to a thorough cleansing of the abdomen by removing all hair by shaving before performing an abdominal operation so it is necessary to obtain cleanliness about the vulva by the same method. Shave and scrub all cases of gonorrhœa vulvitis.

If practicable these patients should be put to bed and required to remain there until the infection is controlled. Unfortunately the patient does not understand the necessity of this part of the treatment and as she is not inconvenienced to any great extent by the disease, it is hard to obtain her consent.

Again we are handicapped in the treatment of these cases that many are found in the poorer classes, that are required to work to obtain a livelihood, a class that can not take the time to be properly treated, particularly true is this in dispensary practice.

If the patient consents to go to bed she should have after the scrubbing and shaving of the vulva with hot water and soap, another scrubbing with lysol solution, 2 per cent. and a pad of gauze wrung out of the solution applied to the vulva and constantly kept wet with the solution.

As the openings of the glands are concealed by the two lips,

it is necessary that they be separated and the pad held between them to keep the solution in proximity to the infected areas.

The cleansing of the parts should be repeated daily and a fresh solution applied.

For the first week the urethra should not be treated locally. The dysurea should be controlled by the diet, and internal medication. A urinary antiseptic may be given, and in some cases there is an apparent benefit from its use.

The bowels should be kept open by the daily use of a mild laxative.

After the acute stage subsides the urethra should receive daily treatment by the application of a 10 per cent. solution of Argyrol, and gradually increasing the strength up to a 25 per cent. solution. The strength is regulated by the control of the disease.

It is advisable to paint around the infected areas a 2 per cent. solution of silver nitrate.

After a week of this treatment the patient may be allowed to become an ambulatory one, and she is instructed to report daily for applications to the urethra. The treatment is continued until all symptoms subside. Unfortunately we can not estimate the duration of the disease and must be guarded as to pronouncing a cure.

If the patient be one that can not take the bed treatment, we must content ourselves by instructing her with the principles of the treatment and the necessity of cleanliness. She should be required to thoroughly cleanse the parts with soap and water, and follow by a wash of lysol solution, after which the parts should be mopped dry and boracic acid powder applied and repeated as often as the parts become moist.

The cleansing should be repeated before retiring and a cloth or a pad of gauze wrung out in the lysol solution applied as previously described.

She should be instructed of the associated treatment as to diet, drink and the necessity of a daily evacuation.

If the patient be one of the second class and has been under treatment, either by herself or by a physician, who has ordered the douche treatment, or has introduced the finger into the vagina in making the examination, the probabilities are that there is an infection about the cervix and working on that presumption after thoroughly cleansing the external parts, we may introduce the examining finger or the speculum to complete the examination of the cervix.

The symptoms of a gonorrhœa infection of the cervix are: the presence of much pus about the external os and bathing the whole cervix, Pryor considered it almost pathognomonic of gonorrhœa if pus is found in large quantities about an unwounded cervix.

There is a swelling of the whole cervix and a general redness about the os, and there is usually present a slight pouting of the lips, associated with an eroded area.

Within the canal will be found a plug of mucous, or muco-pus. Along with these symptoms are those of a vulvitis and urethritis.

These cases are best treated by mopping the discharge away from the cervix and cleansing the whole vagina, first with a normal salt solution followed by either a bichloride or lysol solution. The plug of mucous situated in the canal must be removed, for it is essential that we apply our medicament close to the openings of the glands. It must be recalled that the glands do not empty themselves externally but into the canal of the cervix and we can not expect to attack these openings with the tenacious plug of mucous sticking to their outlets.

After being satisfied that the parts are thoroughly clean a probe wrapped at the end with cotton dipped in Churchill's tincture of iodine swabs the whole canal, but must not be allowed to enter the uterine canal above the internal os.

Nature has again formed a barrier, at this point of which we must take advantage. True the barrier is slight, but we can not afford to ignore it and carry the cocci into the epithelium lining the uterus proper.

The cervix should be scarified or punctured and applications of the same solution made into the wounds.

In obstinate cases I prefer to use a 5 per cent. solution of silver nitrate.

Following the application of the iodine a tampon made of a three inch gauze roller bandage, the end of which is saturated in a lysol solution is applied loosely to the cervix. This tampon should not be allowed to remain longer than six hours, and its removal should be followed by a saline douche, followed by an antiseptic one, either bichloride (1-2000) or lysol (2 per cent.).

The douche should be repeated every four hours and the treatment daily.

As we gain control of the disease the applications can be

made further apart, but as a word of warning do not discontinue, too soon, the vigorous treatment, and be careful in discharging the case too soon. Even after the eroded area about the cervix has responded to treatment it is probable that the glands within the cervix still contain some of the germs, in fact this may be considered the cause of the repeated attacks in the individual, and the reason that cases in which we have presumably attained a cure, so often infect the male.

Lasser found that the plug of mucous in the cervix contained the cocci in only 9 per cent. of cases, but found within the cervix the cocci in 49 per cent.

After persistent treatment and the shreads, as it were, do not clear up it is advisable to remove the infected glands by performing an operation of amputation of the cervix.

In these cases I am careful not to curette the uterus for fear of carrying some of the latent germs on the end of the instrument and depositing them in the uterus higher up, and often close to the tubal opening.

The gonococcus attacks the vagina in only 15 per cent. of cases and is not as frequent a complication as is supposed.

The treatment in these cases is to introduce a speculum, preferably a cylindrical one, so as to roll out the folds of the vagina, and mop dry the cervix and the vaginal walls.

A solution of silver nitrate 2 to 4 per cent. is then poured into the speculum and allowed to gradually bathe the whole vaginal wall, as the speculum is withdrawn.

The speculum is then reintroduced and the vagina firmly packed with strips of iodoform gauze (10 per cent.). This packing should be allowed to remain for twenty-four hours, then removed and the patient given a douche of bichloride or lysol.

It is seldom that there is any necessity to re-apply the gauze, and the patient is instructed to take the vaginal douches three times daily, until the discharge is controlled.

Summary:—

(1). Divide cases of gonorrhœa in the female into those that have, and those that have not been under treatment.

(2). Consider those that have not been treated or handled as probably only cases of vulvitis and urethritis.

(3). Consider those that have been treated or handled as probably infected higher up.

(4). Do not introduce the finger or any instrument in cases of vulvitis and urethritis.

(5). Do not allow the use of the douche in acute cases of vulvitis and urethritis.

(6). Remember that the gonococcus shows a predilection for mucous membranes lined with cylindrical epithelium, and direct the principal treatment to these areas.

(7). The vagina being lined with a squamous epithelium is rarely attacked primarily, but is most frequently secondary to infections about the cervix.

(8). Remove the mucous plug within the cervical canal before attempting to apply any local treatment to the cervix and the cervical glands.

(9). Remember that the gonococcus is found within the cervical glands, even after it cannot be found in the cervical canal.

(10). Be exceedingly guarded in pronouncing a cure.

CHELIDONIUM.

BY MALCOLM A. DOUGLASS, M. D., BALTIMORE, MD.

CELANDINE grows all over Germany and France, in waste places, on old walls, along roadways, and about dwellings. It is pretty well naturalized in the United States, but so far it is not found at any great distance from dwellings, flowering from early in May until October. A fine gamboge-yellow acrid juice pervades the plant, root, stem and leaves; this fact led those who practiced upon the doctrine of signatures to employ the drug in hepatic disorders, from its resemblance to bile in color. It proved one of the hits of that practice.

In the whole of Europe no other plant grows which, when injured, gives out golden-yellow milk; and from this peculiarity no plant is better known to every village child. The milk of the root has a redder tinge than elsewhere.

This fluid is contained in special canals, which reticulate over the leaves and open into main vessels along the ribs.

If a recently gathered tender leaf be placed under a good microscope, one can see the reticulated canals colored by the yellow juice, and plainly distinguish the slow movement of the fluid, whilst crowds of globules pass through the petioles. If a leaf be torn across, the yellow juice issues in drops out of the larger veins on both sides of the ribs.

On the skin the juice makes yellow spots, which on drying turn brownish-black, and also colors the dried root black.

The smell of the recent plant is disagreeable; the taste sharp and bitterish, especially of the root.

On drying it almost entirely loses the smell.

The milk, when dry, tastes more bitter than sharp.

After chewing the plant, the taste remains for several hours and gives a sensation of heat in the mouth, throat and stomach.

Chelidonium root contains two alkaloids. One of these is chelidonine, which has a bitter taste, leaving an after feeling of irritation and alkaloid reaction. It is insoluble in water: in the crystalline form it is also nearly insoluble in ether and in alcohol; it is more soluble in fixed and volatile oils. Solutions of its salts, when tested with alkalies, let fall the chelidonine as a voluminous cheesy deposit, which gradually becomes horny, an exceedingly characteristic test. The other alkaloid is sanguinarin. As we shall take up the discussion of this alkaloid later in the course, we will dismiss it for the present.

The homœopathic tincture is made from the fresh plant, gathered in Spring, and is of a brownish-orange yellow color by transmitted light, having an odor quite like that of tincture of *apis mellifica*, an acrid, bitter taste, and strong acid reaction.

The principal action of chelidonium seems to be that of causing congestion of the lungs and liver, especially the latter; it is also an excessive irritant, and has a narcotic action upon the nervous system. The lungs of animals poisoned by this drug have been found, post-mortem, to be highly engorged, and in some cases hepatized. The liver under its action becomes the seat of much pain, soreness and tenderness; the bowels move rapidly and freely, with thin, bright-yellow, pasty evacuations; the urine becomes bright-yellow, and even stains the linen dark-yellow. It irritates the respiratory nerves, causing a tickling, like dust, in the trachea and bronchi, with violent spasmodic coughing, followed by dyspnoea and oppression of the chest. Sensations of indolence, sleepiness and languor are present. Its action upon the skin is that of vesication.

Allopathic Therapeutic Action.—The popular repute which celandine formerly enjoyed was chiefly as an aperient, a diuretic and a sudorific. It was also considered a powerful deobstruent, and employed with that view in jaundice, acute and chronic hepatitis, gall-stones and other hepatic affections; also in hem-

orrhoids, and in pneumonia with hepatic complications. It has been supposed useful in opacity of the cornea. As a nervine remedy it has been employed in paralysis, for spasmodic coughs and neuralgia. It has also been recommended for eczema and herpes.

Now let us get a picture of this remedy fixed in our minds, in order that, when we meet this gentleman standing at the bedside of the sick we will be able to recognize him.

Chelidonium is adapted to thin, spare, irritable persons; light complexion, blondes; subject to hepatic, gastric and abdominal complaints.

The above described person is the one we should expect to find our remedy to make his abode with. Now, if he is there, there are certain symptoms which will lead us to know he is there, as a boy knows a woodchuck hole by the tracks and other signs about the hole. These signs are:

Constant pain under the lower and inner angle of right scapula.

If you find this symptom, you may be as sure of finding chelidonium as you would expect to find a woodchuck if you saw his tail sticking out of the hole.

Ailments renewed on change of weather.

Periodic orbital neuralgia (right side), with excessive lachrymation; tears fairly gush out.

Constipation; stool hard; round balls.

Diarrhœa: At night; slimy, grayish, yellowish, watery, pasty.

Debility and lassitude after eating; wants to lie down.

Everybody who wants to lie down after eating don't need chelidonium; some of them are afflicted with physical inertia, and need a strong stimulant, like oil of birch.

Face, forehead, nose, cheeks remarkably yellow.

Chills begin in hands and feet.

Shaking chill, with shivering, chattering of the teeth, as if dashed with ice-cold water.

Pressive pains in the right side of the forehead.

Whites of the eyes dirty yellow.

Pains transversely across the umbilicus, as if the abdomen were constricted by a string.

Urine dark-yellow.

Urine turbid on passing it; dark brownish red, frothing at edges of vessel.

Urine stains the diaper dark-yellow.

Stiffness of the neck.

From the above pathogenesis, and from what we have thus far learned of the action of chelidonium, in what, so-called diseases would we expect to derive benefit from its use?

Right here let me say that whenever we find the symptoms above enumerated, no matter by what name the totality of the symptoms are called, or whether unnamed, chelidonium will be the remedy to remove those symptoms, and cure the patient, for where there are no symptoms, there can be no sickness.

Bilious derangements, to which chelidonium is homœopathic, are characterized by the following symptoms: Dull headache, burning in the face, flushed face, loathing, nausea and vomiting, coated tongue, pasty taste, flatulence, increased frequency of the alvine evacuations, dark urine, dimness of sight, sopor.

Gastric derangements are characterized by a sour or saltish-bitter taste, bitter evacuations, increased secretion of mucous and saliva, pasty taste in the mouth, pressure in the stomach, sense of fulness in the abdomen, increased urging to urinate, with a more copious discharge of watery urine.

Jaundice.—Bitter taste, tongue clean and of a deep-red color, tension of the præcordia, urine brown-red, clear, sour; stool white.

Our provings show that papulæ and pustules and rheumatic stitches, when characterizing bilious or gastric derangements, may be treated with chelidonium.

ZONULAR CATARACT IN THE NEW-BORN.—According to the author no case of zonular cataract has ever been reported as observed in the new-born. He contends that such cataracts are developed after birth. Peters caused cataracts by poisoning rabbits with naphthaline. In these cases there was an increase of chlorides in the aqueous. In a woman of twenty-nine, who had repeated attacks of tetany convulsions after confinement, and died of nephritis after cataract had developed, a microscopic examination of the eyes showed the ciliary processes lined with a single layer of enlarged cells with hyaline degeneration of the protoplasm. He says the function of the protoplasm of the cells of the ciliary processes consists in the production of a nutritive fluid, for the osmotic supply of the lens, which is poorer in albumen and salts than blood plasma. To rhachitis, as such, he attributes the significance of a predisposing factor only. The etiology of zonular cataract is thus an open question. He has observed zonular opacities to develop in four cases out of ten children suffering from tetany.—Ed. Zirm. *The Homœopath Eye, Ear and Th. Jour.*

EDITORIAL

FRANK FOSTER LAIRD, M. D.

Dr. Frank F. Laird died on Monday, August 20th, 1906, at Atlantic City, where he had spent some three weeks in what proved to be his last stand against his relentless enemy, asthma. The story of his fight, as told to two of his most intimate Hahnemann College mates a few months before his death, is truly a touching one. While working day and night, hardly taking time to sleep or even to eat, in the midst of the most bitter winter weather, during an epidemic of grippe and pneumonia, he developed the disease and the complication, and every one who knew Laird can infer the result: He kept at it in spite of temperature, prostration and cough until he collapsed at the bedside of one of his patients. Then followed the critical illness, the slow recovery and the sequela against which he struggled for ten years or more, and to which he has finally succumbed.

Dr. Laird was born April 15th, 1856, in Stittsville, Oneida county, New York, was educated in the local schools and Whitestown Seminary, and was graduated from Hamilton College in 1877. In the latter institution he began the brilliant career, of which he had already given promise as a schoolboy, winning the highest honors as essayist, orator and classical scholar, and finally carrying off the first prize over representatives of all the leading colleges and universities of the country in the intercollegiate oratorical contest at the Academy of Music in New York City in January, 1877.

With the class of 1880 at Hahnemann the memory of Dr. Laird will endure as long as any one member lives. To our minds his was the brightest intellect that ever went out from Hahnemann, his facility for acquiring knowledge, literally devouring books, and his wonderfully retentive memory being marvels to us all. To these were added a disposition always sunny, a constant bubbling over of contagious good spirits, a rugged honesty and unswerving loyalty, which characterized

his after life and have endeared him alike to patient and colleague.

He was naturally our valedictorian, and oratory afterward became his pastime, his fad in fact, his speeches at functions of all kinds being a feature wherever he went.

Dr. Laird settled in Utica, N. Y., soon after his graduation, and as a practitioner and citizen more than fulfilled the hopes and predictions of his warmest admirers. When broken in health, he was obliged to move to Los Angeles, California, he once more endeared himself to his colleagues and attracted an enviable clientele.

It has always been a source of regret to those who urged Dr. Laird to come to Philadelphia, in the early eighties and again some ten or twelve years later, after his breakdown, that their efforts were not successful. Climatic conditions might have been sufficiently modified in either instance to have spared such a valuable life. With his brilliant oratory, his personal magnetism, his gigantic industry, his wonderful memory and his enthusiastic love for *materia medica*, there could not have been a more promising recipient for the mantle of Farrington.

Laird has gone to the majority; the class of 1880, Hahnemann College, the profession at large, and hosts of loving and grateful friends and ardent admirers, professional and lay, deplore his loss.

THE DIETETIC TREATMENT OF DIABETES.

UNFORTUNATELY, a great deal of confusion has arisen in the minds of the many physicians in regard to the principles that should guide them in the dietetic treatment of diabetes. Some disregard the question of diet entirely, while others go to the other extreme and as a matter of routine put every patient suffering from diabetes on a strict diet from which carbohydrates are entirely excluded. Both of these views are productive of great harm to diabetic patients—the one because many cases that could be arrested in the early stages by proper restriction of the diet are allowed to go on to the graver forms of the disease, while the routine institution of a strict anti-diabetic diet often gives rise to the formation of acetone-bodies and may precipitate an attack of diabetic coma. As a

matter of fact, no hard and fast rule can be laid down which will apply to all cases, but each case must be studied individually and the proper diet selected in accordance with certain well defined and rational principles.

Von Noorden, who has done more than anyone else to place the treatment of diabetes on a scientific basis, lays down as the first rule to be borne in mind in selecting a diet for a diabetic patient that we must aim to reduce the glycosuria to its smallest possible limit. "Deviation from this rule," he says, "can be allowed or demanded when the dietetic measures taken to reach this end are evidently producing worse evils." This important rule is based on the fact that clinical experience has shown that if we can succeed in eliminating the sugar from the urine of a diabetic and can maintain this condition for some length of time without injury to the patient's health, the power of the organism for assimilating carbohydrates almost always increases. This increased tolerance for carbohydrates may be of longer or shorter duration, but is noticeable in every case.

Before attempting to prescribe a diet for a given case of diabetes we should ascertain exactly the amount of carbohydrate food the patient can consume daily without producing glycosuria. Von Noorden terms this the "tolerating power" of the individual. In order to determine the tolerating power of an individual we make use of a test diet composed of articles of food free from carbohydrates and add 100 grammes of white bread. If on this diet no sugar is excreted the quantity of bread given daily is gradually increased until sugar appears in the urine. If, however, sugar is still excreted on this test diet, the amount of bread given is gradually reduced until the glycosuria disappears or until bread is entirely excluded from the test meal. In mild forms of diabetes the urine becomes free from sugar, while bread is still administered in the test meal. In the moderately severe cases the urine becomes free from sugar as soon as carbohydrates are absent from the food. In severe cases not only must the carbohydrates be eliminated from the food, but the amount of proteid food taken must also be considerably reduced before the sugar disappears, while in extreme cases the glycosuria cannot be eliminated by any dietetic measure. During these tests for the quantity of sugar excreted under various dietetic conditions, we should also observe the effect of these changes in influenc-

ing the excretion of acetone and oxybutyric acid. The toleration power of the patient for other carbohydrates beside bread should also be studied, as wide differences exist in this respect. Having by these tests determined accurately the patient's toleration for carbohydrate foods we are now in a position to select a suitable diet.

Mild cases of diabetes should be placed on a diet absolutely free from carbohydrate material for a period of from two to three weeks. This usually raises the patient's tolerating power considerably. At the end of this period we gradually add carbohydrates to the diet, being careful to keep the amount given daily a little short of the toleration limit, as shown by the preliminary test. Every precaution must be taken to prevent a repetition of the glycosuria in order that we may protect the organism from further manifestations of the diabetic disposition. The danger of acid intoxication from the exclusion of carbohydrates for limited periods in mild cases of diabetes is not very great. Only rarely do the acetone bodies appear in the urine to a dangerous extent and close observation of the patient and daily urinary examinations will always enable us to avoid any danger from this source.

The diet in severe cases of glycosuria present a much more complex problem. A continuation of a strict diet at the beginning of treatment in these cases is frequently attended with a dangerous increase of the acetone-bodies. Von Noorden advocates in the beginning the cautious use of a diet free from carbohydrates and containing but little meat. Egg albumen and vegetable albumen are better tolerated. These patients must be very closely watched during this period, as there is almost invariably a rapid increase of the acetone-bodies when carbohydrates are eliminated from the diet. Should evidences of acid intoxication appear bicarbonate of soda should be administered in large doses and a general diet resumed at once. In all cases after two weeks on strict diet from eighty to one hundred grammes of bread or its equivalent are administered daily. About twice a month the patient should be put on a carbohydrate free diet for two or three days. By this intermittent treatment the glycosuria is held in check and the danger of acid intoxication avoided. The practice of putting these patients for long periods on a strict anti-diabetic diet as a matter of routine cannot be too strongly condemned. Individualization is essential to success in all cases.

GLEANINGS

CANCER OF THE RECTUM.—Gant speaks principally of carcinoma in this paper, only mentioning sarcoma to say that it occurs once to sixty cases of carcinoma. Four per cent. of all carcinomata and eighty per cent. of intestinal are found in the rectum. They may be epitheliomata (5 per cent.) or columnar-celled (95 per cent.).

The former are located at the anal margin and usually begin as dry, warty growths which later form ulcers with sharply defined, indurated edges. They may originate in the sebaceous glands or form old ulcers, cicatrices, warts, etc. They may spread superficially or go deeply, destroying all tissues involved. The columnar-celled are found in the ampulla (50 per cent.), upper rectum (20 per cent.), upper rectum and sigmoid (15 per cent.), and anal canal (10 per cent.). At first they appear as small, moveable, rounded, or flattened, indurated swellings, with elevated centers in the submucosa.

Near and distant metastatic growths are common to both. The epitheliomata especially affect the inguinal glands first, and the cylindric celled type the retroperitoneal, lumbar and sacral glands.

At first there is a vague sense of uneasiness which is hard to explain; later a sensation of weight and uneasiness in the sacro-coccygeal region and sometimes in the limbs during defecation. The stools become frequent and unsatisfactory, then constipation, which may later alternate with diarrhoea. As the growth breaks down proctatitidis intervenes and the fæces are mixed with pus, blood and mucus. The skin becomes excoriated, fistulae and ulcers form and pruritis ani causes great discomfort. Except when low down, the pain is slight until the tumor becomes large enough to press upon the nerves. When the skin and sphincters are involved the pain is marked.

The diagnosis is generally easy to make if a proper examination is made, something that is not infrequently overlooked. The majority of tumors are low down and can be felt by the finger. The proctoscope and sigmoidoscope will disclose those located higher up.

The prognosis is the same as malignant disease elsewhere. The treatment is radical excision when possible, even though there is a high mortality (21 per cent.) and the proportion of permanent cures are small (16 per cent.). Over one-third of rectal cancers are inoperable by the time they reach the surgeon's hands.—*New York Medical Journal*, July 7, 1906.

J. D. ELLIOTT, M. D.

THE SUFFICIENCY OF SIMPLE INTERCOSTAL INCISION IN ACUTE EMPYEMA, WITH A REPORT OF FIVE CASES. J. F. Leys, while recognizing that rib resection is called for in those cases of empyema in which adhesions, which prevent the expansion of the lung, have taken place, thinks that in acute

cases, most of which are due to the pneumococcus, rib resection is not only not indicated but may do actual harm.

This condition is often allowed to become chronic because the general practitioner is not in a position to call in surgical aid and does not realize that a simple thoracotomy under local anæsthesia and the placing of a draining tube in the wound is not necessarily a dangerous operation.

After the site of operation has been thoroughly cleansed and the skin anæsthetized with a spray of ether or ethyl chloride, an incision between the ribs is made and the sides of the wound held apart with artery forceps, in order to allow the pus to flow out. A fenestrated rubber drainage tube is then placed in the wound and secured on the outside by a large safety pin, and the wound covered with sterile gauze, wrung out of bichloride solution. Washing out of the wound, as is now well known, does no good and occasionally has caused death. Five cases are reported which were treated in this manner with very good results.—*American Journal of the Medical Sciences*, July, 1906.

J. D. ELLIOTT, M. D.

TRANSIENT ATTACKS OF DIM VISION OR OF BLINDNESS.—Frequently recurring and lasting from a few seconds to half an hour, constitute a very important symptom of cerebral—most frequently in cerebellar tumors. It may be due to interference with the blood supply of the occipital lobe, to temporary strangulation of the nerve, to increased intracranial pressure or to pressure upon the chiasma by the infundibulum.

Of seven cases of frontal tumor three retained normal visual acuity throughout; in another, vision fell to 6-15, but ultimately recovered perfectly. In the remaining three operated upon, the sight of the eye on the side corresponding to the tumor was badly affected, while the other eye was left normal.

Of the ten cases of parietal tumor four retained good sight throughout; three suffered a definite loss during the attack, but subsequently recovered, and in three the sight was entirely and permanently lost.—*The Homœopath Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M. D.

HYSTERICAL HEMINOPSIA.—J. Valobra considers the study of the eye symptoms of hysterical cases to be of great importance and interest. Hemicrania may be perfectly simulated by hysteria, and there may be present homonymous heminopsia that seems to be of organic origin. In hysterical cases the symptoms are only transitory, and follow the attack of hemicrania for a short time only. These symptoms are somewhat rare; hence the author publishes a case in point, in a young girl of twenty-one years, who had all her life suffered from hysterical hemicrania, anæsthesias and other hysterical manifestations. Following a severe attack of headache she had homonymous heminopsia of the left eye, persisting for two days, and then cured very quickly by electrical suggestion. She had abundant lacrymation of the left eye and anydriasis. Hysterical mydriasis usually accompanies amaurosis. It is probably due to a spasm of the radiating muscle of the iris innervated by the sympathetic. The pupil reacts to light and accommodation. The excitation of the cervical sympathetic also resulted in an excitosecretory action on the lacrymal gland. The psychological theory

regards such phenomena as due to fixed ideas, spontaneous or suggestive. The physiological theory regards them as due to an alteration in the function of the cerebral centers, independent of any ideas. Organic heminopsia is cured by means of suggestion.—*The Homœopath. Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M. D.

FOREIGN BODIES ON THE CORNEA.—Before removing cocaineize thoroughly. Stand back of the patient and hold the head firmly against the chest with the left forearm in order to keep the head steady and give the patient confidence. Separate the lids with thumb and finger, making gentle but firm pressure on the eyeball. When holding the lid open with the fingers, always let the finger project over the ciliary border, otherwise the lid is apt to slip. The spud or gauge ought to be held perpendicular to the surface of the cornea so that in the event of the ball moving, the instrument cannot strip up the layers of the cornea. Not only remove the cinder but also the scar, which may act as a foreign body and prevent healing. If there is much congestion give aconite internally. Hourly instillation of 1 per cent. cocaine in boric acid solution can be kept up until healing has taken place. Before discharging the patient evert the lid and examine the palpebral conjunctiva for any foreign substance. —*The Homœopath Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M. D.

GONORRHOEAL OPTHALMIA.—Dr. Phillips, of Buffalo, says we are likely to have this disease to contend with so long as one-third of the adult females and three-quarters of the adult males continue to have gonorrhœa. For the treatment he advocates alphozone (succinic peroxide), claiming it to be non-toxic, non-irritating, non-painful, and not coagulating albumen, but powerful enough to kill the colon bacillus, pyogenic and pathogenic germs in one minute, in a 1-250 solution. Alphozone is 100 times stronger than hydrogen peroxide, and does not produce effervescence; it is 75 times more powerful than carbolic acid, 6 times as strong as silver nitrate, and equal to bichloride of mercury in the same proportions.—*The Homœopath Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M. D.

THE TOXEMIA OF PREGNANCY.—Strauss gives the results of a careful study of three fatal cases. He says eclampsia, acute yellow atrophy of the liver, and pernicious vomiting constitute a closely related group of lethal conditions. The important fact has been demonstrated that these conditions are autointoxications of one general type. It may be stated in general that his cases were characterized clinically by pernicious vomiting, somnolence, coma or delirium, dry coated tongue, diminished liver dullness, and icterus appearing late. The liver varied in size and weight, and did not always show gross changes. Microscopically examined however, there were always found necrosis of the middle zone of the lobules and fatty degeneration. In speaking of the etiology he says, that there is some substance or substances in all probability endogenous in the gravid female which gives rise to the abnormal conditions mentioned, there is very little doubt. It may be that the future will show that these pathological states of pregnancy are the expression of different toxic agents, but to-day there

is no conclusive evidence that this is the fact. Bouchard gave the impetus to the investigations of the disorders of pregnancy from the standpoint of perverted metabolism. He thought the urine of the eclamptic was more toxic than that of the normal grávida. Others found the blood serum more toxic. The molecular concentration of the blood and urine have been studied, without material result. Hypotheses relating to poisoning from fetal products have been proposed in various forms, but became unsettled from the observation of a case of eclampsia with a hydatid mole instead of a normal pregnancy. Poisonous substances emanating from the placenta have been studied, either cellular in character, particularly from the syncytium, or the products of cell disintegration. Attention has also been directed to admixture of fetal and maternal blood as a cause. Lastly careful study has been made of the ammonia combinations in eclampsia, and to some extent in pernicious vomiting. The satisfactory determination of the character of the toxic agent, however has not yet been accomplished.—*Amer. Jr. Obs.* Vol. 53, 145.

THEODORE J. GRAMM, M. D.

THE ETIOLOGY OF CANCER.—This perplexing subject has recently received the attention of two well-known writers, and while neither claims to advance anything new, yet the present status of the question is well presented. Vineberg points out that it is interesting and instructive to note that the adherents of the parasitic origin are men whom we must designate as clinicians, as for instance v. Leyden, Czerney, Leopold, Olshausen, Behla, and others; while the opponents of this theory are pathologists, as for instance, v. Hanseemann, Orth, Pick, Israel and others.

Some of the arguments that the advocates of the parasitic theory bring forth, may be briefly stated as follows: Such able observers and clinicians as Sydenham and Van Swieten believed in the infectious nature of cancer, as do many able clinicians of the present day. The clinical picture of the disease is as if the individual were attacked and destroyed by a parasite. The occurrence of cancer in endemics as has been observed by several reliable authorities, a number of well known instances of which the author cites. It may be said in passing that Behla, who has specially studied cancer localities, says that the latter usually occur in swampy places, where the soil consists of white clay, and where the rivers are bordered by rich vegetation; and he believes that the parasite is carried by leaves floating on the water. Further favorable evidence is adduced in the existence of certain houses in which successive occupants have been attacked by cancer. Mention is made of contact cancer; of metastatic growths which present a resemblance to diseases like tuberculosis; of positive inoculation experiments from one animal to another; and also the occurrence of epidemics of cancer among the lower animals, as in mice, guinea pigs, and dogs.

On the other hand v. Hanseemann makes much of the fact that the cancer parasite has not as yet been demonstrated. He moreover points out that while epidemics of cancer occur among the lower animals that the disease has always affected the same organ, as for instance in one epidemic the vulva, in another the skin glands, and in another epidemic the canthus of the eye. He holds that these instances argue against infection, but rather point to heredity or to some external cause, the nature of which

has thus far escaped our knowledge. Orth and other pathologists assert that the transmission of cancer from one animal to another of the same species has no bearing upon the infectious nature of the disease, but that they are merely instances of transplantation of the cancer cell. The new growth induced is made up of a proliferation of the inoculated cancer cell, and its growth simply pushes aside the cells of the tissue in which it grows. Under v. Leyden's supervision some investigations were made in the chemico-physical properties of the cancer cell. They found that the cancer cell differs from the epithelial cell in that the black pigment in melanotic cancer is different from the pigment in the normal human individual; that the relation of the albumose to the albumin products differs from their normal proportions; that cancer cells are more easily destroyed, that is dissolved by the gastric juices, but with this difference, pepsin effects them less, while pancreatin and trypsin dissolves them more quickly. Blumenthal found a ferment in the cancer cell which has the characteristic of not only autolytically dissolving the albumin and the substance of its own cell, but possesses this power over all cells of the body. Such observations suggest that chemicophysical researches may throw much light upon the etiology of cancer.—*Amer. Jr. Obs.* Vol. 53, 410. THEODORE J. GRAMM, M. D.

THE NATURE OF CANCER also forms the topic of an article by Brooks H. Wells, in which he has reviewed much of the later researches relating to this question. The difficulty of briefly stating these, however, makes a systematic review impossible. A few important points only can be given. In speaking of cell inclusions he says the small number of inclusions indicates that no such results are to be expected as those which follow the presence of masses of parasites as in smallpox or scarlet fever, but experimental results show that great proliferating stimuli may be given by minute quantities of poison and a priori grounds are thus obtained to justify the effect, in this case a tumor, through the activity of a relatively few parasites.

The wide distribution and identity of character of carcinoma throughout the whole vertebrate family prove that cancer is primarily based on the few conditions which are common to the forms in which it occurs and that it is only incidentally a problem of human pathology. The cytological and experimental investigations of carcinomata as a whole bear out this conclusion and show that the essential factors must be sought in the potentialities residing in the cells which constitute the living body. The great diversity of the conditions of life of the forms in which malignant new growths are found makes it exceedingly doubtful if external agencies play any part in determining the incidence of the disease.

Transmission of cancer from man to animals or from one animal to another of a different species has never been successfully accomplished, and in view of our present knowledge of the cytolytines and cytotoxines we can easily see why such attempts must always result in failure. The consequences to the transferred cells are analogous to what occurs when blood corpuscles from one animal are injected into another of a different species. They are destroyed as an albumen strange to the species.

Many facts point to the cell as being the essential feature in the inception of cancer and lead us to seek for the peculiarities in the cell life of

normal and cancer tissues which limit the power of independent existence in the former and raise the power to the level of being the chief characteristic of the cells of the latter.—*Amer. Jr. Obs.* Vol. 53, 420.

THEODORE J. GRAMM, M. D.

THE HEREDITY OF TUBERCULOSIS.—Bossi says the attempts to destroy the tubercle bacilli after entering the organism have not as yet succeeded. This is also true of the endeavor to combat the poison given off by the bacilli. Much more may be expected from rational prophylaxis. The present investigation is directed toward the prophylactic measures in obstetric practice. It is still incorrectly accepted that the children of tuberculous parents eventually die from the disease, that the infecting germs pass over to the fetus in utero. Gioelli's investigations with guinea pigs have shown that tubercle bacilli are never found in the blood or organs of the fetus of a tuberculous mother; and neither could an animal be infected by the fetal liver pulp. The fact also that in only three placentas of twenty-six dead born fetuses could tubercle bacilli be demonstrated, seems to prove that the latter only travel as far as the placenta and usually do not pass to the fetus. In order to conclude this study experiments were made with tuberculous pregnant women in the clinic. Portions of the placenta from these women and from the fetal livers were used to make an infusion, of which two and a half cubic centimeters were injected into the peritoneal cavity of guinea pigs. From these experiments is shown the presence of tuberculous poison in the placenta which passes over to the fetus and may cause death of the latter and abortion. When the pregnancy continues to full term these poisons induce the condition of incomplete development and defective nutrition which are so often observed in the children of tuberculous mothers and which predispose to infection. Under such circumstances children are in great danger of infection by contact with tuberculous parents. It has been shown that the mortality of such children is great during the first year, and diminishes later when the contact with the parents is less constant. The first prophylactic measures therefore consist in removing the child from the source of infection. The crusade against tuberculosis must begin with the obstetrician. It is our duty to seek for definite information of the existence of latent tuberculosis in the mothers who give birth to children deficient in development and nutrition. These children should be removed from the family and placed under more favorable conditions. The author concludes as follows: 1. The passage of the germs of tuberculosis from the parents to the fetus during its intrauterine life almost never occurs in the human being. 2. The children born of tuberculous mothers may be affected by the tuberculous poison which tends to accumulate in the placenta and from there pass to the fetus. 3. This transition causes that condition of backward development, of organic weakness, which favors infection during the first months of life. 4. From this it follows that the obstetrician should begin the campaign against tuberculosis at this time, since he may diminish the tendency to infection and may remove the danger by all those means which prophylaxis and hygiene suggest in such cases.—*Arch. f. Gyn.* Vol. 77, 21.

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY JOHN HUTCHINSON, M. D.

MENTAL DISEASES.—A distinctive feature of all modern text-books of insanity, and that which augurs most hopefully for future treatment, is the point of view of their authors, who regard the insanities entirely as bodily disorders. The term "mental diseases," with many others having a metaphysical implication, is now happily falling into desuetude, and a modern science is being built up on a foundation of physiological, pathological, and clinical information, the result of steady, painstaking observation of fact with a resolute avoidance of theory and speculation. Truly this science is only beginning, but an enormous mass of evidence has been accumulated which from time to time requires collating, sifting, and classifying.—*American Physician*.

[Samuel Hahnemann lived several centuries ahead of his time. He demonstrated conclusively the *actual* relation and importance of all mental states in respect to bodily disorders. Slowly but surely is his correlation of symptoms being appreciated, or, perhaps, to put it more conservatively, "*discovered*."]]

SNAKE VENOMS: Showing how recent discoveries with regard to them emphasize the parallelism between their pathological and therapeutic action. By T. G. Stonham, M. D., London. This interesting paper was read before the British Homœopathic Congress, held in London, July 6th, 1906. Following are some important extracts:

You are all so well acquainted with the therapeutic uses of the various snake poisons, and are so constantly employing them in practice, that I feel the greatest diffidence in addressing the society on such a well-worn subject. And indeed, from the standpoint of simple homœopathic prescribing, I should not venture to do so. The symptomatology is abundant, the leading indications are clear, and the whole pathogenesis so striking as to be easily remembered. The symptom list of lachesis by Hering, the introducer of snake venom into homœopathic use, and the splendid monograph on crotalus by Hayward, cover the ground with regard to those two poisons so completely that I do not think anything has been discovered since to add to them, and I am not aware of any new provings having been

made of naja and the other less frequently used snake poisons. So that from the homœopathic side I have no new matter to bring forward.

It is curious that while the allopaths have been so busy in appropriating many of our drugs they have left this, one of the greatest, in our undisturbed possession. No doubt the obstacle has been the infinitesimal dose; but there are signs that their prejudices with regard to minute doses is giving way, and I do not think it will be long before we read in the daily press, or elsewhere, of an astonishing discovery made by some brilliant member of the orthodox school, of the wonderful medicinal qualities of snake poison. This is the more likely to happen as the physiological chemists and bacteriologists have lately been paying a good deal of attention to the subject in connection with researches on immunizing bodies and anti-toxins.

The net result of all these recent researches into the constitution and action of snake venoms has been to establish more firmly on the pathological side the homœopathic relationship of these substances to the diseased conditions in which they have been found curative by our school. We have long known that crotalus was our best remedy for septic wounds and for hæmorrhages accompanied by disorganization of the blood and destruction of the blood corpuscles. We have recently learned that of all the snake poisons it is the most opulent in cytotoxins and hæmolysins which rapidly produce the septic or gangrenous condition of the tissues and the degraded hæmorrhages which resemble the septic wounds, and foul ulcerations, the putrid blood-mixed discharges, and the pourings forth of broken-down blood from any or all of the mucus surfaces, which, whatever the name of the disease in which these symptoms occur, are always successfully met by the administration of crotalus.

In these conditions we have not been accustomed to prescribe naja, because the provings we possessed of naja, and the cases of poisonings by bites of that serpent, exhibited those symptoms of sepsis and hæmorrhage in a much less marked degree than either crotalus or lachesis. We now know that this is accounted for by the cytotoxins and hæmolysins being present in but slight degree in the naja poison. But we know, on the other hand, that the neurotoxins are in great abundance, and that our selection of naja amongst the snake poisons to combat affections of the nervous system, especially those involving the centres of respiration, the cardiac and vasomotor centres, and the nervous supply of the throat and neck, is justified by their close homœopathic relationship.

But, after all, the isolation of these different toxins in the physiological laboratory, though it may satisfy our craving for a pathological basis for our prescribing, and assist in a scientific demonstration of the law of similars, gives us but little assistance in the practical work of prescribing. We learn from this modern laboratory work no indications for differentiating the various uses of these venoms which we did not know before from the provings. In fact it does not carry us so far as the provings; it gives us the gross indications for the venoms, but does not follow them to their finer shades of action. It has no information to give us, for instance, concerning the mental effects of the poisons. It cannot differentiate between the low muttering delirium, talking to himself, with drowsiness, of crotalus, the rapid excited talking of lachesis, and the suicidal insanity

of naja. We should never have learnt from it such a valuable guiding symptom common to all the snake poisons as "symptoms worse on waking from sleep," "sleeps into aggravation." We should never know from it that crotalus, bothrops, and elaps affect mainly the right side, and lachesis and naja the left; that with naja there is aphasia from paresis of the organs of speech, with bothrops aphasia from loss of memory, and with elaps the patient can speak, but cannot understand speech. For all these and a hundred other important symptoms—important for the treatment of disease—we have to go to the provings.

The truth is that the method adopted by Hahnemann for the elucidation of drug action—the proving of drugs in the healthy human body—is the most really scientific. The work is done with a finer instrument than those used in the laboratory. The human body is a more delicate reagent than any chemical test, and the conscious human mind gathers information which no microscope can reveal.

It is right that we should reject no knowledge from any quarter, and should keep ourselves informed of all the latest discoveries made in physiological chemistry and in other departments of modern science, but we must not forget that we, the homœopathic body, inherit the best method ever employed for the discovery of the therapeutic value of drugs, and that in the division of labor, which must occur in medicine as in all other pursuits, our peculiar province should be to perfect and extend our provings. We may be assured that if we do so we shall always be in the van of progress in the knowledge of the therapeutic use of medicines, and that any future discoveries made in the laboratory will but supplement and confirm truths which we shall already possess.—*Monthly Homœopathic Review*, August 1, 1906.

A VERIFICATION OF COFFEE.—By Adrian A. Pompe, M. D., Vancouver, Wash. Dr. Pompe, Vancouver, Washington, who took his Master of Homœopathics degree from Hering College this spring, reports the following interesting case: "A baby, nine months old, had slept since birth only an hour or two at a time, day or night. Any little noise would awaken the patient, and then it would worry continually. The mother and entire family were worn out by the sleepless child, as they had to give it constant attention. The child had been treated by a so-called homœopath since birth, but without effect, and finally gave it up as incurable. Then one of Portland's M. D.'s tried his skill, but also to no purpose.

The key was plain and the prescription easy: The people were old residents of Vancouver, the father an employe of the U. S. government, who had been transferred to the East while the mother was pregnant, and had received word that they were to be re-transferred to Vancouver. This joyful news excited her so that she could not sleep as she formerly had done.

I gave baby one dose of Coffee 1m, and told the mother that her baby would sleep that night and be well in the future. This was two weeks ago, and the baby has slept as well as any child since the dose, and has been transformed from an irritable, sleepless, worn-out baby into a really healthy child, to the delight of the whole household. The whole neighborhood is equally delighted and wonders what potent remedy was given.—*The Medical Advance*.

VIRES VITALES SUSTENETE.—This is the rock upon which we have builded. But how do we do it? What is vital force? Where does it come from, and how much of it does each individual possess? How does he retain it as long as he does, and why does he lose it at all? Who has measured it, and is there any way by which he can retain what he has indefinitely? If not, why not?

We talk wisely about sustaining the vital force and do not know what it is. We know mighty little more about vital activity than did our simial ancestors who hung from the limbs of trees by their tails and blinked at their companions who sat upon the ground on their haunches and blinked back at them. And to think that we, knowing so little, are ever ready to shy rocks at each other's heads on account of what we do not know!

This vital force, whatever it is and whatever it comes from, is a wonderful thing; and in whatsoever manner we may be able to sustain it or add to it, one thing is absolutely certain, and that is, if we are not exceedingly careful, we can help a man to get rid of it mighty suddenly. But view it as we may, it is still the most wonderful force in the universe of man
 Stephens, in *Eclectic Medical Journal*.

THE MOSQUITO AND DISEASE.—The May number of the *Medical Summary* contains a paper from the pen of Dr. Robert Gray, of Pichucalco, Mexico, on the irrational "hoax" that mosquitos spread yellow fever, malaria and other diseases. He states that the "Nurses and I were bitten by all classes of mosquitoes in vogue throughout seventeen yellow fever epidemics—merely stating that I had seen them take their beaks from fever patients and put them directly into the cutis of persons not infected—my own hundreds of times—rationally seeming to indicate that as the logical moment to inoculate, there being any semblance of logic or reason in the theory."

"In the year 1866 or '67, data not at hand at the moment, Brennan, and other yet more inland, high, rolling prairie towns, in Texas were visited by a yellow fever epidemic so virulent that more than 90 per cent. died in the inception of the disease, which spread in a manner more fast and furious than ever before known without mosquito intervention, as there were no such mediums there.

"There are many tropical points where there are no mosquitoes at any time, and many more where there are none for months and months of the dry season, yet remorselessly scourged by malignant malaria and yellow fever in the absence of mosquitoes, said fevers abating at once and soon disappearing under the cooling influence of the rainy seasons, when the solid ground seems to spew up mosquitoes in countless millions. Possibly the active flea served the turn of the mosquito during his vacation—the only possible medium for popular inoculation."

Dr. Gray is of the opinion that yellow fever and malaria are water borne diseases, and in support of this theory he points to the fact that in Southern Georgia and Florida, where malaria was once very prevalent, it is now very rare wherever the people are supplied with artesian water, though mosquitoes are as plentiful as ever.—*The Homœopathic Recorder*.

THE BELLADONNA PROVINGS OF THE O., O. AND L. SOCIETY. The manuscript for the book upon the test drug proving of the O., O. and L. Society is ready for the printer. It will make a large octavo volume of about seven hundred pages similar in size to one of the volumes of Hering's "Guiding Symptoms." It will contain complete narratives of the fifty-three individual provings which constitute the body of the work, together with a thorough digest and presentation of the results obtained in synoptic and schematic forms, and in different degrees of condensation. It will be illustrated with sphygmographic tracings and with photomicrographs of changes induced by the drug in animal tissues. It will be published by subscription, and the price will be determined by the number of subscribers. It is designed to furnish the book to each subscriber as nearly as possible at cost price, and by vote of the O., O. and L. Society, should any profit chance to accrue from the sale of the work it will be devoted to the cause of drug proving. Your subscription is solicited, as it is desired to send the book to press immediately, and deliver the copies before September 10. If the list is large enough to warrant it we may be able to reduce the subscription price to four dollars, or even two dollars. So subscribe now.

For the information of any who may not be acquainted with the nature and scope of this work it will be stated that it is a re-proving of Belladonna under scientific conditions and by laboratory methods, which has been carried out under the auspices of the American Homœopathic Ophthalmological, Otological and Laryngological Society, with the endorsement and co-operation of the American Institute of Homœopathy and various State and local societies, and by the aid of proving boards of twelve or more physicians each, mostly specialists, which were organized for this purpose in eleven of our largest cities.

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COMMENDATION.

By J. B. Gregg Custis, M. D., Washington, D. C., ex-President of the American Institute of Homœopathy.

John P. Sutherland, M. D., Boston, Mass., ex-President of the American Institute of Homœopathy.

George Royal, M. D., Des Moines, Iowa, ex-President of American Institute of Homœopathy.

HOWARD P. BELLows, M. D.

The profession is greatly indebted to Dr. Bellows for his ardent labors incident to this belladonna proving and for his studies upon its results. The *Medical Advance* says: "This volume certainly should be in the hands of every reader of the *Medical Advance*, for we think it will prove of practical value to every student of *Materia medica* as well as the specialist. The author has spent much time and labor upon the work, and the analyses of the provings we are assured are on quite new and original lines, which demonstrate what may be done in an elaborate study of drug proving. Dr. Bellows had builded better than he knew by his admirable work with belladonna, proclaimed in this volume, he may be the forerunner of a new way in the study of homœopathy, if he can only induce the homœopathic profession to band together in improving our science instead of running after the false gods found in the allopathic camp. Let us perfect the science of therapeutics.

HOMŒOPATHIC MATERIA MEDICA AND THERAPEUTICS are neither complete or perfect,—less perfect than they should be at this day,—and probably never could become a complete system of cure. Yet we know it to be best and most comprehensive the world has seen. What are we doing to amplify and strengthen it? What fraction of our time and effort is given to its development? In short, what is the sum total of progress in our distinctive branch of the healing art during the past twenty-five years. Does not the work of our fathers in medicine put us to shame?—and they lived, a mere handful, without the advantages or the standing we enjoy. We are continually seeking something new, and where do we look for it? What is new in homœopathy? Where are the modern provings? Where are reprovings to be sought? What space in society proceedings is given to verifications, homœopathic cures, and *materia medica* bureaus? What in therapeutics are we most concerned to find, the curative *similimum* or a new "get easy quick" mixture?

Homœopaths have, in some respects, always been alert and active but, in these latter days, do not cover sufficient ground. Matters of vital importance are permitted to go by default. In our eagerness to further special work, to keep pace with the alleged progress of science, to be up-to-date, we have gone astray.

We allow the most scientific, the most practical, the most valuable system of cure by drugs,—the very essence of our separate existence, and the only possible excuse therefor,—to remain before the world in the garb of half a century ago. Opportunities to modernize homœopathy and place it on a dignified, impregnable basis are regularly disregarded. Whose fault is this but our own?

I fear the answer to the question, "What are we doing?" must be this: "Playing into the hands of the enemy."

The old school cannot be blamed for using every means in its power to accomplish its ends. Were conditions reversed, we would probably do the same. The attitude of a minority, in the right should be that of unceasing vigilance; of constant opposition; of tireless efforts to win,—to gain every point, great or small, at all times; of uncompromising devotion to principle.

The name "homœopath" should be to every one of us a source of jealous pride.—Dr. Candee in *Chironian*.

A COLLECTION OF PLANT CONSTITUENTS, including alkaloids, glucosides, amaroids, sugars, starches, plant acids, coloring principles, fats, waxes, and some rare aromatic principles has been presented to the New York botanical garden by E. Merck & Co., of Darmstadt and New York. The number of exhibits is between 400 and 500, comprising not only the most active medicinal principles, and other things for which uses are now known, but many things extracted from plants only experimentally, for scientific purposes, for which it is hoped uses may be developed in the future.—*Amer. Jour. Pharm.*

NUCLEINIC ACID AS A PROPHYLACTIC AGAINST PERITONEAL INFECTION AFTER ABDOMINAL OPERATIONS. Hannes (Breslau) calls attention to the high mortality after abdominal operations, and after treatment, especially the radical operation for uterine cancer, whose technique has received so much attention. The mortality has still remained high, and then the next step naturally was in the direction of prophylactic immunization against infection. At first antistreptococcic sera were used and then cultures from the growth itself. About two years ago at the suggestion of v. Miculicx another attempt was made along these lines to reduce the mortality after abdominal operations in general and especially after operations on the gastro-intestinal tract. Depending upon the fact that in the conflict against pathogenic germs invading wounds the leucocytes play an important role, the attempt was made to increase the resistance of the peritoneum against infection by the injection of nucleinic acid for the purpose of inducing hyperleucocytosis, an effect possessed by this substance. Miyake showed experimentally that against coli infection and especially those micro-organisms involved in perforation peritonitis these injections effected a pronounced increase of the resistance of the peritoneum. Renner demonstrated the same to be true in the human being, and the author used the method in 51 cases of cancer operated by the radical method. He injected 50 ccm. of a 2% solution of nucleinic acid in the form of a sodium salt, about twelve hours before operation. The amount of hyperleucocytosis induced amounted to from 9% to 144%. Of 51 cases operated eleven died which amounts to 21.5% as opposed to 32% and 41% formerly. Since certain modifications in the technique, especially in drainage, were made at about the same time, it is not possible to make an accurate estimate of the effect of the nucleinic acid treatment alone, but the author is convinced that a material influence may be ascribed to it.—*Zentralbl. f. Gyn.* 1906, 681.

THEODORE J. GRAMM, M. D.

FOREIGN LITERATURE

CONDUCTED BY E. FORNIAS, M. D.

SCIATICA.—Dr. Paul Chiron, after making a criticism of the old and actual treatment of Sciatica, and speaking somewhat favorably of the epidural injections and electricity, states, that while all diseases have their proper characters, they nevertheless evolve according to the individual attacked. Hence, the differences, sometimes so notable and deceiving, between the brilliant descriptions given in the books and the plain clinical facts. So much so, that one must logically conclude, that a particular case of disease varies according to the evolution imposed on it by each organism. Thus, we do not consider sciatica by itself, be this a neuralgia or a neuritis; we take into account, the occasional cause, the individual temperament, the character of the pain, its seat, its modality and its phases. In one word, we treat the patient, not the disease and our remedies will only act when they present the greatest similitude with the troubles observed in the patient. Then, he proceeds to give the leading indications of our remedies, as follows:

Aconite.—Irritation and inflammation of the nerve, with burning, lancinating pain and numbness of the parts; worse at night and during motion; especially for recent cases.

Ammonium Mur.—Severe and long continued sciatica, with pain in the left side, as if the tendons were too short; lame while walking and while sitting. Patient complains of gnawing pains in the bones, which are slightly better while walking, but is free from pain while lying down. Sensation of contraction as well as true contractions in the legs. Stinging, tearing, and ulcerative pains in the heels, relieved by friction, and increased at night in bed.

Angustura.—Tormenting pains along the sciatic nerve and in the posterior part of the thigh, forcing the patient to limp. Painful rigidity of the muscles, making the patient to walk lame; when he extends the leg, sensation of pressure in the anterior muscles of the thigh.

Arnica.—After any kind of effort or exertion, burning, stinging, tearing pains; numb and bruised feeling in the affected limb. Constant change of position, as everything on which the limbs lie feels too hard. It is especially useful in women during confinement.

Arsenicum.—The pains appear with typical regularity, and are worse at night and unbearable towards midnight. Burning-tearing pains, with great restlessness, obliging the patients to move the limbs often, in order to obtain relief, but the pains are increased by vigorous motion. The patient cannot lie on the painful side, and he is very weak, with inclination to lie down. He is worse from cold application and temporarily relieved by warmth. It is particularly indicated when the trouble is due to staying in cold, damp houses, or the result of sudden suppression of eruptions.

Belladonna.—Ischias, with pain extending to the hip-joint, especially at night. The patient has to change position often on account of the pain and there is a marked sensitiveness to touch, even to the clothing, to the least concussion, and even to the stepping of other persons in the room. He is worse by the least draught of air and the paroxysms occur principally in the afternoon, and last till midnight. There is inclination to sleep, but cannot; and feels better from letting the limb hang down, from warmth, after perspiring, and when in the erect position.

Bryonia.—When the pain is seated in the lumbar region, extends to the thigh and is worse by sitting up, by moving, and late in the evening. The patient is often relieved by cold water and lies best on the painful side. There is atrophy and emaciation of the affected limb.

Calcarea carbonica.—Sciatic pain caused by working in water. The pains are more severe when the limbs hang down, and are relieved by raising the knees, and they extend down the legs, keeping the patient in a constant distress.

PAEDIATRIC PRECEPTS (*Continued*).

20. To obtain a moist atmosphere in a couveuse (Bonnaire) it suffices to place over bottles or bags containing hot water, towels previously immersed in boiling water, and have them changed every two hours.

21. The indications for humidity in these cases are: Extreme hypothermia, scleroderma, cyanosis, and progressive loss of weight. A moist couveuse embarrasses cutaneous evaporation.

22. Two fine enclosures are the electric couveuse of Fochier, where the lighting of the lamps is regulated by a thermometer, and the couveuse of Tissir, heated by a chafing-dish hermetically closed, and filled with a saturated solution of acetate of ammonia or soda, and which allows to obtain a nearly uniform temperature during 10 or 12 hours.

23. The indications of the couveuses are based on the weight, temperature and general state of the debilitated infant. The incubation is necessary when the weight is below 2000 grammes, when the rectal temperature is inferior to the normal, and when there is sclerema or cyanosis of the extremities.

24. The contra-indications are infectious diseases (erysipelas, bronchopneumonia, sub-cutaneous abscesses). A couveuse exposes to infection those who are extremely sensitive (Marfan).

25. The average duration of incubation is from 1 to 2 weeks, but in some cases may be prolonged. The weight of the infant should be ascertained every two days, and the temperature taken at the rectum mornings and evenings. Avoid colds and all sorts of contamination every time that the child leaves the couveuse for a feeding (every two hours).

26. Oxygen is a precious adjuvant of the couveuse and so are likewise warm water, frictions with olive oil, warm aromatic baths, and wrapping of the body, limbs, and posterior part of the head with cotton-wool. Massage is also an important auxiliary.

27. Almost every case requires daily warm baths (37°) of two minutes

duration. In impending collapse, wash the body with hot water and soap, and the aromatic baths with two or three litres of wine, are very useful.

28. Rectal injections of artificial serum are highly recommended by Legrand. At the Bandelocque clinic the rectal injections of Hayem's artificial serum are employed with care. They consist of NaCl., 5 grammes; Sulphate of soda, 10 grammes, and water, 1,000 grammes. Observations at Dr. Remlinger's clinic have shown how valuable are these injections to combat hypothermia. They support the infants that cannot suck, and excite their appetite by improving the general condition.

29. The technique is very simple. In a syringe of Roux, one absorbs the necessary quantity of artificial serum sterilized and previously heated to 37°-38°. To the syringe is attached a Nelaton's catheter No. 10, which is introduced into the rectum to the depth of 4 or 5 centimetres. This done, the injection is pressed in, and on retiring the sound, the finger is held for a few seconds on the anal region, and the infant is covered again.

30. If the infant does not reject the enema at the end of a few minutes, dress it again, but, if on the contrary, a stool is produced, make the toilet of the anal region and give another injection. Give one or two injections daily, each of 5 to 10 cubic centimetres, according to the age and weight of the child.

31. When hypothermia is associated to cyanosis feed the infant with a cup or spoon. If it cannot take the breast introduce the milk directly into the stomach by means of a catheter (gavage).

32. Place the infant in a glass couveuse which may permit a continuous watch, day night. At the beginning of an attack of cyanosis, take the child out of the couveuse, undress it, rub it well, make rhythmical pressure on the thorax, insufflate it, turn it with head down, and employ warm baths, stimulants and oxygen. (Legrand.)

33. Infection is a cause of death, so the infant should be isolated. The skin must be closely inspected and the cord and wounds antiseptically dressed. Intestinal infection is avoided by proper alimentation. Protect the lungs against colds (withdrawal from the couveuse, voyages, baptism, &c.). Premature infants are very liable to broncho-pneumonia; which usually evolves without fever and only becomes manifest by some dyspnœa, cyanosis, a few fine rales in the chest and a progressive loss of weight.

34. Broncho-pneumonia in those suffering from congenital debility, is due to infection of the respiratory tract by the streptococcus, staphylococcus, colibacillus, and the pneumococcus. At the post mortem we find the lesions of the broncho-pneumonia and pulmonary infection. As a prophylactic measure employ antisepsis of the nasal-respiratory canal (nasal pomades).

35. In feeding the premature, bear in mind that secretion and deglutition are lingering and that death from inanition is possible. It takes time to get the primitive weight of birth, and the curve of growth and development is feeble, hence the necessity of a very carefully regulated alimentation.

36. The insufficiency of the digestive secretions and the gastro-intestinal muscular asthenia are predisposing causes of gastro-enteritis and atrepsia. While feeding these weaklings we confront two perils, inanition and death from insufficient alimentation, or digestive trouble and diarrhœa from excessive feeding.

37. The feeble creatures should have a wet nurse and if possible be fed by the mother. A wet nurse with her child can be temporarily employed. She should nourish both children, or the mother of the weakling give the breast to the child of the wet nurse. (Budin).

38. If human milk is not obtainable, give ass's or goat's milk, or peptonised milk, or sterilized cow's milk. Bretonneau recommends equal parts of milk and veal bouillon prepared without herbs or salt. (For this purpose I have used successfully Bovinine). The proportions for this bouillon are 250 grammes of veal for 500 grammes of water. Taylor and Wells extol equal parts of peptonized milk and barley water, a teaspoonful every two hours.

39. The nourishment can be given with the bottle, spoon, syringe (feeding by the nose), or with the catheter (gavage). By gavage is meant the direct introduction of the milk into the stomach, when the weakling cannot or has not the power to suck or take the breast.

40. When the child has gained strength and weight, gavage should be alternated with the breast (gavage mixte), then it is gradually suppressed (gavage de renfort). It should be resumed at the least digestive trouble.

41. Rectal alimentation is recommended when the child is unable to swallow. The enema is composed of 15 grammes of milk and 15 grammes of starch-water with a pinch of powdered pepton (Legrand).

42. The recuperation of the primitive weight is a long process, the curve of growth is feeble, and a sudden considerable rise of the curve of weight seems to indicate a fatal issue. (Budin.)

43. The feeble organism struggles hard to maintain a normal temperature. The congenital weaklings support better than other children the surrounding thermal changes, and while they endure well the summer heat, provided they have a good nurse, they hardly can stand the winter cold. It is under these conditions that sclerema supervenes. (Boumel.)

44. Sclerema is characterized by indurations, located in the subcutaneous cellular tissue; they develop primarily and with preference in the calf of the leg; the skin here and other parts becomes cold and very tight. The sclerosed tissue is red in the first, yellow in the second stage of the disease.

45. Sclerema gives to the soft parts a peculiar resistance, nearly analogous to wood and marble, and is susceptible of generalization. The hardening process involves not only the cellular tissue of the limbs and trunk, but the face and lips, and it has been found in the stroma of the lungs and other viscera and in various tissues, especially the muscular. (Baumel.)

46. One can well understand the danger to which a weakling is exposed, whose lips are stiff, like pasteboard and unable to hold the nipple and suck; and where the difficulty of sucking is accentuated by the involvement of the lungs and respiratory muscles, which render breathing, first arduous, later impossible; hence asphyxia.

47. It seems that the more accentuated the congenital debility is, the more influence has cold on the production of sclerema, and consequently the organic resistance is weaker and peripheric thermic lowering easier.

48. It seems that under this double influence (external refrigeration and feeble interior, organic and thermic resistance) the fat becomes congealed. In fact, some believe sclerema is due to the congelation of the fat.

Knöpfelmacher, however, asserts that this hardening process is favored by a small proportion of oleic acid in the fat of the suckling, and principally of the new born.

49. Sclerema should be distinguished from œdema of lower extremities, observed frequently enough in the new-born and under different pathological states (infectious phlebitis, heart disease, liver trouble, &c.)

50. As to prognosis we can assert that congenital weaklings are, especially in winter, exposed to certain death, particularly so, if they contract, when not placed in a couveuse, bronchitis or broncho-pneumonia, or if the nurse has not been properly instructed in the care of these cases.

51. A nurse, in such cases, should give only a single breast at the time, every hour, and watch carefully the infant during the teats. It should favor the prehension of the nipple by the free hand (index and middle fingers) while arising and approaching the head to the breast with the opposite arm. The index finger firmly applied above the nipple, depresses this in such a manner that the weakling, having the nostrils free, can breath easily and practice suction more successfully.

52. Artificial feeding, even mixed feeding, principally in the fall and winter, usually lead the congenital weakling to an almost certain death. We may well say that they die of cold and hunger. (Baumel.)

53. In a general way, if after all precautions, the infant does not show a progressive gain in weight, we may conclude that the nurse is bad, or is not trained in the nursing of these weaklings.

54. Children born weak do not remain either emaciated nor unintelligent. In case of future narrowing of the pelvis, premature delivery is a legitimate operation (Budin). In the weakling medical supervision is an absolute necessity.

55. Besides those children who come into the world with congenital inability on the part of their cells to assimilate nutriment properly, there are other equally weak born at the end of large families, when the reproductive power may be assumed to be on the wane, or to be partially exhausted. (Hutchison.)

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THE TEACHING OF SURGERY IN OUR COLLEGES.

BY

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(Read before the Surgical and Gynecological Association of the American Institute of Homeopathy, Atlantic City, Sept. 13, 1906.)

There can be no more appropriate place for a discussion of the teaching of surgery in our colleges, than at a meeting of this Surgical and Gynecological Association which numbers among its members so many educators and practitioners of eminence and experience.

Medical instruction with us is still going through a process of evolution, erratic on account of our varied types of institutions, retarded by eccentric legislation. There are some who cling, more or less closely, to our old methods, while others would throw everything overboard, to take on, irrespective of differing conditions, those of foreign schools. Without entering into the merits or demerits of the latter, it can at least be said that they are crystallized, that the standard in each country is uniform and that the same is true of national supervision.

Our first aim should therefore be to make the teaching of surgery, and for that matter the entire course in medicine, as uniform as possible throughout this land. As for government control, if state's rights must be respected, can we not have a standard which will permit the legally licensed physician to practice in every state, territory and dependency; which will

not render him liable to arrest if he drive across a state-line, half a mile away, because New York counts spelling as fifteen numbers, while Pennsylvania rates it at ten?

In a general way, what should be the trend of our teaching? In this country, where have been developed the most brilliant lights in specialism, it is but natural that they should dominate our schools, until we seem to be in danger of turning out Jacks at all of them and masters of none; until one feels like taking his lantern in hand and hunting for a good, old-fashioned family doctor. Osler, in his farewell address to the students of McGill and Pennsylvania, has drawn a charming picture of this man and the country is hungry for his likes.

Our next object should then be to educate well-grounded, well-rounded physicians and to do this the course in medicine must have two definite aims:

1. *The foundation*, of which too much cannot be taught, as it will never be learned after graduation: Anatomy, Physiology and Pathology in the fullest sense; *Materia Medica* with Pharmacy and Medical Chemistry, including Hygiene.

2. *The superstructure* which has its essentials, indispensable to the general practitioner, necessary for every one: Medicine, Therapeutics, Surgery and Obstetrics. Billroth's dictum, freely translated, that the surgeon must first be a physician, is à propos here and I might add that one of the perils of our schools is the decadence of Obstetrics; the obstetrician has been eclipsed by the gynecologist, but as Kelly justly says, the barrier between the latter and the general surgeon is purely an artificial one and bound to disappear; so that he advises gynecologists to study general surgery and become general surgeons first. Let us do good pelvic and good plastic work, but let us, above all, turn out men skilled in modern midwifery. Hahnemann of Philadelphia has taken a step in the right direction by erecting a separate and distinct building for maternity cases and women.

Around these essentials will cluster the different specialties, emphasized according to the personality of each teacher, but always subsidiary to the fundamentals: Neurology and Insanity, Dermatology and Syphilology, Eye and Ear, Nose and Throat, Gynecology and Andrology, Pædiatrics and Orthopædics, etc., etc. This must ultimately be the sphere of electives, so universal in our colleges of Arts and Sciences, and some of the medical schools have long since taken steps in this direc-

tion. The foundation must be taught; so too the essentials of the superstructure, but beyond satisfying any particular requirements of state supervision, all specialties belong to the elective class, a certain percentage of which should of course be required during the final years. Their general consideration readily assigns them to one or the other of the four departments above enumerated.

This brings us to the specific object of this paper, the teaching of surgery in our colleges, and we must now ask ourselves, what shall we preserve of our own and what shall we take on of foreign methods; what is the best arrangement for the American student, for the four-year course and for our peculiarly well-filled days of teaching?

I propose to consider, separately, the several methods generally used, illustrating their application in the school with which I am connected, not because our course is ideal or perfect, but because it is the one with which I am most familiar and with the development of which I have been intimately in touch during the ten years I have had charge of the surgical department.

We have two sets of didactic lectures:

1. The *Junior course*, so-called, to the second and third year men, and consequently repeated. This covers what is known as general or principles of surgery: inflammation, repair, the infections, the fevers, tumors, granulomata, venereal diseases and those of the different tissues. Additional emphasis is derived from the fact that the lectures on general pathology are given concurrently during the same years.

2. Regional or special surgery constitutes the *Senior course*, a repeated one to the two upper classes, and includes the head, spine, face, mouth, jaws, chest, breast, œsophagus, abdomen, hernia, the rectum, genito-urinary, fractures, dislocations and orthopædics. This teaching goes hand in hand with the clinical work to be referred to presently.

These repeated courses have been criticised by some as becoming monotonous, but fundamentals cannot be taught too forcibly or too frequently. When the old, two-year course which possessed at least this redeeming feature, was changed to the three-year, graded one, this fact was quickly noted by both teacher and student. Again, those who are admitted to advanced standing, or even those coming from other schools, fall in line much more readily by following the second periods. In

special subjects, such as Dermatology, Anæsthesia, etc., we have modified the repeated course by giving a few lectures in the third year and following these with greater clinical or practical facilities in the final one. The time may come when the latter plan will supersede the former.

The much-discussed didactic lecture, after years of buffet-ing, still hangs on. There is no question as to the need of a systematic, comprehensive review of a subject, before taking up its varying details; of a clear, composite picture, before studying each blending face. The success of these lectures must depend largely however upon the personality and enthusiasm of the teacher; if in addition to erudition and experience, he possess the happy faculty of clearly and impressively driving home predigested, condensed data, there is nothing that sticks like the "spoken word." Failing in this, recourse may be had to a schema, either on the blackboard or manifolded for distribution, which can be explained and elaborated; a text-book or even a good compend may be selected, or a syllabus printed, of which the students have interleaved copies, under-scoring and annotating as different points are brought out.

With these limitations the didactic lecture has a useful and permanent place, but the plethora in most of our curricula must be restricted more and more; as to improved quality, let every one look to his laurels! We have found it stimulating to divide the lectures among several instructors; good teachers are developed and the danger is obviated of their becoming a perfunctory task when the monopoly of one man. It seems almost needless to add that illustrations of all kinds, grouping of specimens for demonstration in the museum or laboratory and all other visual impressions make the points brought out more vivid and tenacious.

The bulk of experience seems to show that the academic *recitation* is impracticable, at least in so far as the teaching of surgery is concerned. This is due to the lack of comprehensive or standard text-books, as well as to the shifting or kaleidoscopic character of surgical literature, for the leaves of a work are hardly dry from the press-room before it is antiquated. The student cannot be given a chapter to read, remember and recite, without explanation, annotation, or alteration. We have obtained excellent results from a modification of the old-time *quiz*, the "marked recitation," on the previous week's work. In our repeated courses these are conducted by

members of the teaching corps with the under class, and insure a familiarity with the subject as the student goes along, which lays the foundation for a better appreciation of the second year. Extramural *coaching* is also fostered, for it trains the coming men, encourages them by an oft-needed financial return and the average medical school is not rich enough to support the tutorial system. In the second course we have adopted the "test examination," in vogue in many institutions. On stated days, in any week the teacher may select, an unexpected examination is given and these are repeated as often as he deems fit. This too encourages progressive study and does away with the vicious custom of *cramming* for finals. By specifying the days in the week on which subjects may be "tested," the student is enabled to systematize his reading, especially if the assurance be added that there will not be more than one such test on any single day.

When we come to consider the question of clinical teaching, it may be said that *ward work*, so-called, has been the battle-cry of many schools and for many years, but it is a problem hard to solve and of varied solution. The daily visit, or "ward walking" as some term it, is more or less perfunctory the world over, unless the teacher make of it a clinical lecture. With us it is purely an elective and a few students can often derive benefit from following certain cases and from the remarks of certain clinicians. The general and continual introduction of classes of students for regular ward work or study is not feasible in most hospitals, either from lack of material to go around, or because they usurp the duties of our present system of transient, one-year residents, to say nothing farther.

This difficulty can be partially overcome by the increasingly popular, surgical "conference." Instituted with us for the Seniors at first, it has been extended to the Junior year, the character of the work varying according to the attainments of the respective classes. In a general way, ward cases are assigned in rotation to two students who make an exhaustive study, one of the diagnosis and pathology, the other of the treatment, during which time they have access to all the hospital facilities. They present the same to the class and answer questions during a general discussion. The patient is then operated or dressed by these students, or by the teacher with their assistance. An admirable adjuvant is the plan of "case teaching" by Burrell and Blake, which we constantly use. It

opens up the entire service of the hospital, past and present, as well as the instructor's private resources and those of his colleagues. Once well inaugurated, there is no limit to the material and its character can be selected to fit coincident didactic teaching.

As each individual follows these conferences for one-half of each year, a fair amount of ward experience must of necessity be assimilated, but while an excellent solution of this mooted question, there remains more to be done before the ideal is reached. Some are already talking of a fifth year which is the interne or resident period of the French student, and I might add that the conference is but a modification of his thesis. It is just here that every member of every hospital staff can help the cause of medical education. While the hospital connected with a school may not be able to accommodate all its students, there are plenty of other institutions to take care of them. Each spring the cry comes to us, give us residents; and what is the reason? Some say it is the long course necessary for a degree and some hospitals coax them along with a stipend which they despise or fail to earn before they are half done, while others offer independent operative opportunities and they go out, sooner or later to curse their sloppy work. In spite of the House Doctor's Disease which is after all "the proper amount of self-respect" of Rackstraw in Pinafore, the resident is but a student, full of enthusiasm and anxious to learn. Take him in hand, be his ward teacher, instruct him in operations and specialties, go into the laboratory with him, admit him to the sacred precincts of the private room and let him see how real *pay-patients* are treated, and the market will be glutted. Let us have a fifth year by all means, but let it be the resident or interne year and let the attendants of our hospitals constitute the tutorial corps. The few left overs can be cared for in the dispensaries, by the specialists, or as substitutes.

Along kindred lines comes the sectional clinic, with material drawn from the wards and more particularly from the outpatient department, and this is too well known and too universally approved to require more than a passing mention. We are especially fortunate in the success of this system at Hahnemann and in classes of ten or even fifteen, it is really tutorial. In the Junior year the instruction is devoted to surgical landmarks and their application to diagnosis; general surgical,

genito-urinary and orthopædic diagnostic methods, manipulations, dressings, apparatus, etc. The teaching periods for the Seniors are more frequent and their character is changed to suit the more advanced student. They cover general surgery, orthopædics, rectal work, genito-urinary and skin diseases. With an ample corps of painstaking and enthusiastic instructors, the method probably has no superior, its only limit being that of available time.

There remains the clinical lecture or the general operating clinic which is really a didactic lecture, more profusely illustrated, but no wealth of material provided by any hospital or any locality, nor any massing of the same can make this really systematic. It must needs be analytic rather than synthetic, showing many of the blending faces, but not the composite whole. On the other hand, the possibilities for demonstration, for detailed discussion and for impressiveness are infinitely greater, but here again the personal equation plays an all important role. With us this course is a repeated one, during the last two years, and with care can be made to largely cover the entire field of didactic teaching. It may not be amiss to mention some of the distinctive features.

Every student should be able to see what is going on, some by proximity and some with opera-glasses, especial advantages being accorded to the section in surgery at the time. This entails inconvenience to operator and assistants, but with willingness, backed by a little ingenuity, the result can usually be accomplished.

The clinician should be constantly talking, explaining, teaching and by so doing unconsciously shows his work more clearly and holds the attention of the class. It is but thinking out loud and if he has given his case careful study, there is an abundance of thoughts to speak.

The necessity for taking notes should be done away with, permitting the student to devote himself entirely to the subject under consideration; and yet he must be made to see, hear and remember by the recitations and tests above referred to. For the latter, we are indebted to the courtesy of the students' journal; notes are taken by one of the assistants, revised by the teacher and published for study. Considerable labor is entailed for all concerned, but we believe the results more than justify the same.

With our new clinic we are enabled to use the reflectoscope

and that in a novel way: what cannot be shown on the subject is thrown from outside on a ground-glass screen fitting the entrance door, immediately after the demonstration or operation. The wealth of illustrative material available is only limited by the number of pictures in our surgical libraries. The same is true of the illuminated cabinet, for the exhibition of X-ray and photographic plates, while even radioscopy can be seen by a large class.

Here, as in all clinical teaching, particular stress should be laid upon diagnosis and pathology, for after all, the battle is more than half won when the practitioner can recognize a condition and know its why and wherefore. Cases too should be selected to cover as much ground and of the beaten, everyday ground, as possible, although an occasional rarity is not out of order. Operative legerdemain should be tabooed and of several operations or methods of treatment, the one he selected which, while approved, is best adapted to the average man.

In short, the whole subject should be made fascinating in its simplicity; should be handed out to the student in such a form that he may hope to do as well, if he studies as hard; that he feels the teacher is not on a pedestal, not a shadowy myth amid the clouds about Olympus, but only an older student ready and anxious to welcome him to his class.

Another and very useful form of sectional teaching is the surgical laboratory or work-room. So-called "bandaging" is somewhat arbitrarily taught in the second year, but it includes a mass of abstract facts which must be learned at some time and has been elaborated until it might better be known as a course in practical surgery. The different bandages are shown and practised; the same is true of handkerchiefs and cravats, the various uses of plaster of Paris and adhesive, and the full line of splints. When later in the course, a Liston or Levis splint, a Gibney or Stimson dressing, a Moore's sling, etc., are called for, the student knows what you mean and how to apply them. He learns equally well, at the same time, the various sutures and ligature materials and how to prepare and use them; dressings of all sorts, when indicated and how sterilized; disinfection of the hands, as well as the operative field; all kinds of instruments and how to clean them; solutions, powders, etc., etc. This and a great deal more that he is taught is perfectly familiar to a good clinical nurse or to an intelligent

orderly, even to the development of an "antiseptic conscience," although they do not understand the underlying principles. A moment's thought will recognize the possibilities of this kindergarten form of teaching.

The course in operative surgery, also sectional with closer subdivision, comes in the third year, the first of clinical work—where it belongs then. It is admirably supported by that in regional Anatomy, a repeated one to Sophomores and Juniors. A great deal is justly made of the latter in some schools and there are those who insist that a surgeon should teach it. In this respect, probably the one formerly given by Deaver at Pennsylvania was ideal, but with a master like Weaver nothing can be left to be desired by anatomist or surgeon. Our operative surgery teaching, with practice on the cadaver, is most exhaustive and thorough, perhaps too much so for the average man, and it is a question whether it should not be divided, the more special portion being elective, in which case live animal work could be advantageously incorporated. On the other hand, as now given, certain operations, gynæcological, eye, nose, etc., might well be added.

Through the generosity of a patron, our clinic has been provided with a suitable laboratory, which has opened up the way for a course in surgical pathology and diagnosis as well. A Senior elective, for small sections and patterned somewhat after that of Bloodgood at Johns Hopkins, it makes use of completed histories, patients and lesions the student has recently seen, fresh material and museum specimens, microscopic or lantern slides, X-ray and other illustrations. Aside from the intrinsic possibilities for instruction, there can be no more comprehensive review of the entire surgical course and with the latter the teacher must naturally have an intimate acquaintance, besides being a practical pathologist.

The subject would not be complete without a reference to *organization*; we believe in a system and we have developed one that answers our purposes very well. Every teaching period, no matter of what character, is reported and recorded; this encourages regular attendance on the part of instructors, tells at a glance what has been taught, what has been omitted, what has been repeated. The same is true of all markings, based upon the recitations and tests above mentioned, or upon attendance, proficiency and reviews in sectional work, every one is recorded and every one counts on the term average.

This not only gives each exercise a value in the mind of the student, but it goes far to help the prestige of the younger teachers. Again, if this term average be a safe one, say of 90, the student is exempted from an end-term examination, so that the industrious man usually has but one final bugbear, that before his State Licensing Board.

I have briefly discussed the different methods of teaching surgery: the didactic lecture, the conference, the sectional and general clinics, the laboratories of practical and operative surgery and of pathology; I have attempted to show how this teaching may be fixed by properly distributed recitations, reviews and examinations, and how the course may be blended into an evenly balanced whole by an organized system. While, as before stated, this particular course may not be the perfect and ideal one, and no one recognizes its shortcomings more keenly than I do, the object of this paper will be fully realized, if by discussion and conference on the part of our educators, the teaching of surgery in our colleges shall be made a rational and uniform one.

BEFORE AND AFTER CARE OF CASES OF ABDOMINAL SECTION.

BY

D. P. MADDUX, CHESTER, PA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania.)

PROBLEMS of surgical technique appeal in a large degree, to the operator alone, and have no part in the paper which I present; but the non-operating physician is interested in the management and care of patients before and after abdominal operations and this contribution is written to help him, rather than to interest the surgeons.

The most efficient aid the physician can render the patient and operator previous to operation, is by obtaining the most precise and exhaustive knowledge of the physical condition of the patient, by making painstaking, repeated and thorough physical examinations, aided by exact laboratory tests, and determining, as far as human knowledge goes, the conditions of heart, lungs, kidneys, nerves, blood and viscera, and by a knowledge of the patient's physical idiosyncracies and peculiarities.

I feel like making an especial emphasis of this point, because many conditions that are classed as post-operative are conditions that were pre-operative, and only discovered after operation because the patient was then under more careful scrutiny and observation; and some genuine post-operative conditions might be avoided if the patient had been earlier subjected to a more thorough study.

There are, of course, many abdominal operations performed with but little time to acquaint ourselves with the patient or give them any special preparation; but in a deliberate operation we should consider how, by attention to the general health, exercising or resting, diet, baths, attention to bowels and kidneys, we can get our patient in the most favorable condition possible. In the matter of the kidneys, it seems the greatest emphasis should be placed upon the quantity of urea and total solids.

EXERCISE.

Previous to operation that degree of exercise should be taken which best advances general health—it should always be within the limit of fatigue or exhaustion—and had best be of the type that would calm, rather than excite. Few patients need more than one or two days in bed, except the posture is needed to deplete hyperæmic pelvic organs. The full-blooded and active are perhaps more benefited by the preliminary rest than the weak and anæmic, as Treves says:

“The strong man has his mode of life suddenly interrupted, his blood vessels are full, his viscera have adapted themselves to the exigencies of an active life; his tissue changes are active and extensive; oxygenation is quickly disposing of the great refuse matter which is constantly accumulating at the very moment when the tide is abruptly checked. This man finds himself motionless in bed, every circumstance of his life is changed; he has no time to adapt himself to his altered position, and it is a matter of little wonder that the inflammatory process which has been induced, runs riot and is not readily controlled.”—(*Operative Surgery*, Treves, Vol. 1, paragraph 9.)

DIET.

If the patient is in good general health and the operation does not involve stomach, she may indulge in ordinary diet up

to within forty-eight hours previous to operation. The diet had better be considered in relation to those articles of food and drink judiciously stimulating elimination; but if the operation is upon the stomach or upper intestinal tract, the patient is best prepared by a course of sterile liquid diet, with special attention to the cleanliness of the mouth and teeth.

Cushing found that the micro-organisms much increased in the stomach by solid foods, their number steadily decreasing as digestion advanced, becoming almost absent when the stomach was empty.

"The duodenum is often sterile, the number and virulence of the bacteria of the intestines increase in proportion to the distance from the duodenum, and attain their maximum at the ileo cæca valve."—(*Abdominal Operations*, Moynihan, P. 21.)

The day preceding the operation the patient should have all the water to drink that is desired. Indeed, they should be encouraged to drink copiously, often taking hot water to favor elimination.

PURGE.

The question of the pre-operative purge is still an open one with many surgeons. Empty intestines contain less coli communi and are easier for the surgeon to handle, but the extreme must be avoided of depleting our patient; or the usage of such drastic and stimulating catharsis that the intestines will not readily respond after operation, when we really need it most. It is best to have no hard and fast rule in this matter but be guided in the use of the purge or laxative by the individual patient's condition. My personal preference is for Castor Oil ʒi to ʒii, given from 36 to 48 hours previous to operation. The taste can be disguised by the foam of beer or malt, by coffee or by orange juice on the top and bottom.

The use of simple rectal enema early on the morning of the operation will generally be desired to remove the remaining gas.

For the past year I have followed with most happy results, the custom introduced by Dr. Van Lennep in his clinics of the hypodermic injection of 1-120th gr. of Atropine Sulphate previous to the operation, followed by 1-60th of Eserine Sulphate before the patient left the table; the amount of Eserine being increased if pus or infection is found in the belly.

BATHING.

A patient contemplating an abdominal operation should endeavor to get the skin of the entire body in as healthy and cleanly condition as possible by general baths and soaping and massaging skin, the temperature and duration of bath being determined by the patient's general condition. I cannot but obtrude the observation that I believe the thorough mechanical soap and water cleansing both of the field of operation and surgeon's hands is of more importance than chemic solutions.

To secure the most composed mental attitude of patient previous to operation, is of helpful importance. Tact, diplomacy and watchfulness on the part of those who converse with the patient are desirable, not only exercising care as to what is said, but a more especial care as to the things left unsaid.

CASES.

Permit me to report two cases as illustrating at least the happy coincidence of the prophylactic treatment of hemorrhage and shock.

Mrs. L. R., aet 30, a most typical and markedly hereditary hæmophilic, had been subject to two previous surgical operations of a comparatively trivial character, in each of which she nearly bled to death, and in which the operations were protracted on account of the inability to check the bleeding. One month previous to operation I started to give her Hamamelis Virg. tincture, t. i. d. For the three days previous to operation, Calcium Chloride, grs. v, every four hours. Immediately preceding the operation she received a high saline enema containing 3i of Adrenaline Chloride. A double Salpingo-oophorectomy, ventral fixation and appendectomy were performed which proved absolutely uneventful, both during and following the operation, the amount of blood lost not being in the slightest degree excessive. It has not, however, altered the hæmophilic tendency, for she tells me a slight scratch still bleeds excessively.

Mrs. J., aet 36, from a previous curettage, and three months later an amputation of the cervix, had most alarming shock symptoms. Each of the operations were very brief and the ensuing shock very protracted and profound. Six months later carcinoma being found in the uterine canal, the patient insisted on taking the risk of a third operation. For four

days previous to the operation she received hypodermic injections of fifteen drops of Adrenaline Chloride every four hours. Immediately preceding operation she received a high rectal enema of normal saline one pint and Adrenaline Chloride 3i. Twice, while on the table, were fifteen drops of Adrenaline Chloride injected into the superficial veins of the arm. I performed an abdominal pan hysterectomy, yet the patient, from this more serious operation, rallied promptly and did not at any time show symptoms of shock.

I quote these two cases for what they are worth. The thought is at least worth something as to how much trouble we may anticipate and at least attempt to prevent.

POST-OPERATIVE CASE.

The complete consideration of the post-operative care of abdominal cases could not be comprehensive within the proper scope of this paper. In an uncomplicated case it is more important what not to do, than what is done. The patient's first need is the nearest approach to complete rest that can be secured, keeping away of relatives and visitors, and making the environment as soothing and restful as possible. Thirst can be avoided if she has received a high enema of normal salt previous to leaving the table, and can often be best relieved by repeating same.

The nausea can be combatted by Acetic acid, inhalation of oxygen, stomach lavage, often equally well secured by permitting copious drinks of water which, when vomited, will wash out stomach. In an uncomplicated case liquid nourishment such as table tea, albumen in water, milk and lime water, can be given as soon as nausea subsides. There has been a wide digression from the 24 hours of "no food or drink," and surgeons have found that their presence, when tolerated by the stomach, contribute in a large degree, to stimulate peristalsis. The toleration of the stomach is best determined by sips of hot water or table tea. I think practically all operators permit a liberty of motion, or rather of being moved, after section cases such as was not tolerated a few years ago. Indeed, nurses are instructed to frequently change the position of a patient from the back to either side, as desired, believing the tendency to adhesion is often thereby lessened. The position of the patient will, of course, be influenced by the charac-

ter of the operation. With shock or shock tendency of course the foot of the bed should be elevated, this being further emphasized upon the stomach or gall bladder cases. In pelvic cases, or those in which we desire drainage of lower abdomen, the exaggerated Fowler's position will be found best. The manner of treatment of post-operative shock from abdominal operations, presents practically nothing not in common with all shock cases. Recently I have confined myself in the treatment of shock cases to the use of Adrenaline Chloride injected directly into the superficial veins of the forearm—to hypodermoclysis or intra venous infusion of normal saline containing $\frac{3}{i}$ of Adrenaline Chloride.

I do not sympathize with the method of treating shock with the use of least efficient and potent remedies and gradually working up to the more powerful and efficient ones; but believe in making our initial treatment of it by the most efficient means at our command, and the methods suggested are free from the danger of accumulative effects, which, in the tardy absorption of drugs in the condition of shock is likely to happen.

The problem of enema and purge after abdominal operations is one involving a wide variance of practice. In brief, clean, uncomplicated cases we can practically give ourselves no concern. The more protracted the operation, the more the intestines have been exposed or handled, the longer delayed is the reactive peristalsis. I fear we very often use methods to produce the audible expulsion of the much desired gas or a bowel movement quite as much to bring to ourselves the knowledge and reassurance of favorable progress as from any real need of using them. We cannot expect many patients with empty intestines, in a quiet, prone condition, with the absence of food stimulation, to have an active degree of peristalsis. If the abdomen is flat, and we know the operation was clean, give them at least twelve hours rest from the disturbing enema. Then commence with the low enema of soap and water, inserting, in the interval, the rectal tube or soft rubber catheter. If no results are obtained from this then use the high, compound enema (Magnesia Sulph. $\frac{3}{ii}$, ol. Terebinth, $\frac{3}{ss}$, ol. olive $\frac{3}{i}$, Glycerine, $\frac{3}{vi}$). Cases that will not retain the high compound as ordinarily administered for a period sufficiently long to be effective, can sometimes be relieved by the method suggested by Murphy, of placing a douche bag but slightly

above the bed level and permit its contents to slowly percolate into the colon.

It is wise at each visit to auscultate the abdomen to determine rumbling, and from a practical standpoint, prompt and continued rumbling is almost as valuable reassurance as the expulsion of gas per rectum.

In regard to the repetition of the enema I believe we should be guided entirely by the amount of gas present and the strength of the patient. The milk of Asafoetida will be found a valuable addition to the enema in nervous, windy patients.

The use of the alternate applications of heat and cold to the spine, as advocated by Dr. Tuller, should not be considered as a dernier resort, but should be promoted to an earlier application.

Except in the face of an active infection, I see no warrant for the routine use of Calomel and citrate within the first forty-eight hours after an operation. If a patient's tongue remains clean, belly flat, temperature and pulse normal, we can, not only safely, but wisely, wait for the indication for a purge to be based on precisely the same general constitutional symptoms as would indicate its post-operative use in a non-abdominal case. If, however, the danger symptoms of an ascending pulse, temperature and white cell count, a flushed, anxious face, a drying and pointing of tongue, an increase of nausea and restlessness, a tendency to distension, with a lessened peristalsis as heard by auscultation, then we should stimulate peristalsis by the most active persistent methods the patient will tolerate.

Think again of the Atropia and Eserine. Try repeated doses of Castor Oil, even if vomited, of Croton Oil in capsules or enema. Keep at work with enemas, all the while doing what we can to conserve the heart and strength of the patient. Turpentine stupes, electricity, deep kneading with the knuckles over the colon, the passing of a hot cautery over line of colon, as suggested by Kelly, or the ether spray, as suggested by Ewald, are all adjuvants to be considered.

I do not hesitate to add my endorsement to the judicious use of Morphia for the relief of the pains of the first twenty-four hours. I have not found it delayed or lessened peristalsis; per contra, in children and some excessively nervous cases, I think it facilitated the expulsion of gas. Most cases will not need Morphia, for it is astonishing what little discom-

fort follows many abdominal operations, but I do not withhold Morphia when it is needed.

I fear the use of rectal feeding, after abdominal operations, is too frequently overlooked, and in the first few days we can often use it to advantage particularly in the anæmic or those who have been depleted by hemorrhage. Those who miss the stimulation of coffee can sometimes earlier tolerate this method per oram. In these days I think it is hardly worth while to drop a word of caution in regard to the continued watchfulness of the kidneys, particularly as to urea, the total solids, indican and acetone, but those of us who have been robbed of what seemed sure success by later kidney complications, cannot help but call attention to this matter.

The matter of remaining in bed after operation is of necessity, governed by the nature of the operation. I fear, however, that we still have a relic of obstetrical empiricism remaining in the getting up on the conventional "tenth day." When in doubt, keep them in bed. I doubt if the average patient from the most uneventful operation, is really made more comfortable, or recovery advanced by letting him out before the close of the second week.

A word of caution may not be amiss as to the unwarranted optimism on the part of many physicians as to the immediate results to be obtained from abdominal operations. Many patients are promised a speedy relief from conditions which an experienced operator knows will take considerable time to accomplish. The degree of sensitiveness in wounds and individuals, widely varies, and the removal of diseased tissue does not immediately take away the results of its protracted presence.

I recognize most keenly the defects and limitations of this paper. I have simply ventured to give some of the results of my personal observation and experience trusting it may evoke a discussion calling forth the wider and better expressed opinion of others.

SPHYGMOMANOMETRIC DETERMINATIONS AND THEIR CLINICAL VALUE.

BY

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(Read before the Homœopathic Medical Society of the State of Pennsylvania.)

IN discharging the sense of obligation which, as the representative of our local society I assure you I keenly appreciate, I feel it incumbent upon me to select for your entertainment a subject that is attractive and not repellant and forbidding, as the title of my paper may indicate.

The use of the adjective "sphygmomanometric" which, by the way, might well be adopted by alienists as a test word for those suspected of general paralysis of the insane, may possibly strike you as savoring of pedantry, particularly so when I admit that the more euphonic equivalent phrase "blood pressure indicating" would serve as well. Yet, the selection of the term sphygmomanometer as the proper name of blood pressure measuring instruments, seems to justify the use of its adjective, in at least the caption, to this paper.

The instruments of precision in the armamentarium of physicians (well developed before the advent of this latest acquisition) have now reached such a stage of, shall we say evolution, that practically relegates their use or employment to clinical specialists.

That this is unnecessary goes without saying when we consider that skill in their use is the result of frequent resort to them.

The fact that the rank and file of physicians seldom resort to these instruments of precision, which frequently determine treatment as well as diagnosis and prognosis, is a matter for regret and is the direct cause of many humiliating experiences; our inefficiency is far more frequently the result of lack of careful investigation than from inherent incomprehensibility or actual paucity of resource. The justification for the addition of a new clinical instrument depends upon the possibility of acquiring information otherwise unobtainable, its practicability, accuracy, reliability and the possibility, through physiological and pathological knowledge, of interpreting its findings and applying the results in clinical practice.

That we have all these qualifications in the sphygmom-

anometer will become apparent to all who go to the trouble to acquire a theoretical and practical working knowledge of the instrument.

If there is one act of the physician, in his clinical contact with his patient, more characteristic of his calling than another, it is "feeling the pulse." It is so time-honored in its association with clinical investigations that a hand feeling the pulse is one of the bearings in the coat of arms of the London College of Physicians; and the mirth-provoking comic valentine, so often sent us by waggish friends, also attests to this fact. Any measure that will make this important examination more efficient is to be welcomed.

Although any palpable artery can be taken for the purpose of examination, yet the peculiar fitness of the radial artery for this investigation makes it practically the one always selected. In addition to its accessibility it is perhaps the artery best adapted for the purpose of obtaining trustworthy information as to the condition of the general circulation, because the hand has no special circulation of its own liable to extreme variations for functional purposes.

There seem to be a few misconceptions about the factors producing the phenomena of the pulse. One of them particularly concerns the subject chosen for this paper and to this misconception we will address some consideration.

Text books of physiology explicitly state that the pulse is caused or produced by an expansion of the artery.² The comparatively small quantity of blood discharged by the ventricle and the total capacity of the entire arterial system make it extremely unlikely that any perceptible expansion or dilatation of the peripheral arteries occurs when we reflect that a positive expansion of the commencement of the aorta and its first branches actually takes place to accommodate the ventricular discharge. Physiologists admit that even in large arteries when bared the "increase in calibre of the artery (at the time of the pulse) is relatively so slight that it is invisible at the profile of a large artery,"² thus invalidating their explanation of the production of the pulse.

In the intervals between the pulsations the tension within the artery relaxes and, in consequence, the arterial tube becomes more or less flattened. "Then comes the so-called wave of blood propelled by the ventricular systole or, to speak more accurately, the liquid pressure in the arteries is increased and

this forces the artery back into its cylindrical form.”¹ It is this change of shape from the flattened condition impressed upon the vessel by the finger to the round cylindrical shape which it assumes under the distending force of the blood that constitutes the pulse; it is not an increase in the diameter of the blood vessel, but an increase of the blood pressure within it, created by the ventricular systole. The pulse then indicates the degree and duration of the increased arterial tension or fluid pressure within the artery putting its walls on the stretch.

In this connection it will be well to remember that changes in the diameter, or perhaps better stated, calibre of the peripheral arteries, are produced solely through the medium of the vaso-motor nervous system.

Another curious misconception is that the pulse indicates the rapidity of the onward movement of the blood within the artery. That this is not so can be demonstrated on your own radial artery. Compression of the artery to the point of obliteration of the pulse will find the artery throbbing all the more vigorously up to the very point of obliteration; pulsation, therefore, is not an evidence of the rapidity of the current. Indeed, an unusually vigorous pulsation should excite suspicion of an obstruction in the distal circulation. The wave transmitting the increase in tension travels twenty to thirty times the rate of the flow of the blood current.³

As we have seen that the pulse signifies the tension or distending force of the contained blood, then exactitude in the estimation of this liquid pressure is greatly to be desired. Such terms as hard, soft, compressible and incompressible, high, medium and low tension are not accurate enough for comparisons.

Then again “in feeling the pulse” the personal equation enters too largely because the tactile sensation and the discernment of the investigator are too variable.

Therefore, any agency that will enable observers to record their results translated into a standard of measure, and of such accuracy and reliability that leave little to be desired, is certainly to be welcomed with open arms. And this agency we find in the blood pressure indicator—the sphygmomanometer. It may be considered a fact beyond dispute that the efforts at producing a clinical instrument that will parallel in accuracy the results obtained with the mercurial manometer tied in the arteries in laboratory experiments have been successful, and,

in addition, this instrument does not require a high degree of skill and is quite free from errors of technique.

There are numerous physiological and pathological data to be borne in mind when interpreting the findings of this instrument, and, since we have considered a few of the physiological bearings of the pulse, it will be well at this point to consider those directly bearing on the use of this instrument before considering the instrument itself.

There are four factors which determine blood pressure; they are: First, the energy of the ventricular wall of the heart; second, the peripheral resistance of the arterioles and capillaries; third, the elastic resistance of the aorta and trunks of the larger arteries; fourth, the quantity of the circulating blood.

In connection with the first factor, energy of the ventricular wall, there are three points to be remembered.

The *first* is that increased rate of heart action is not necessarily attended with rise in blood pressure; within reasonable limits difference in rate has slight effect on pressure; a hurried action of the heart results in incomplete filling of the ventricles and this offsets the effect of augmented rapidity.

The *second* point is the protection that the heart enjoys through the possession of a most important centripetal nerve—the *depressor* nerve.

This nerve connects the walls of the ventricular cavities with the medullary vaso-motor centers. The endings in the ventricles are stimulated by undue distention of these cavities from increasing peripheral resistance.

These impulses are carried through a filament that in man is included in the pneumogastric nerve. This nerve exists as a separate anatomical structure in some of the warm blooded animals.

On reaching the vaso-motor center in the medulla the impulses, which up to this time have been wholly centripetal, are now changed into centrifugal radiations that “reduce blood pressure chiefly by lessening the tonus of the vessels governed by the splanchnic nerve.”²

A slow but steady fall of the general blood pressure occurs until the mercurial column descends to one-half or even one-third of its former height.²

“This nerve is not in continuous action; it has no tonus, for the section of both depressor nerves causes no alteration in the blood pressure.”²

"In this nerve the heart possesses a protective mechanism of the first importance by means of which it is able to shield itself automatically from overwork entailed by continued high blood pressure." ³

These statements about the depressor nerve of the heart, culled from various authorities on physiology, are to be accepted as beyond dispute, and of such vital importance in the interpretation of blood pressures that I will frequently allude to it at the cost of tiresome repetition.

The *third* point is that with a high resistance of the arterioles and capillaries the ventricles can not empty themselves thoroughly, and this sets a limit to the rise in pressure; this incomplete emptying of the ventricles and the protective reflex depressor mechanism of the heart set a check to the rise in blood pressure over and above which no augmentation can occur, no matter how great peripheral resistance may become or how free the supply of blood to the heart.

Another point to be remembered, in passing upon the significance of alterations in blood pressure, is that in both reflex lowering and raising of this pressure all the vessels are not simultaneously dilated or constricted.

There is normally a frequent adjustment of the vascular supply to the functional requirements of the various organs that does not materially affect general blood pressure except, perhaps, when the splanchnic vessels are generally dilated during the active period of the process of digestion.

Even in this condition the shunting of blood into the visceral vessels can generally be compensated for, and even over-compensated, by vascular constriction affecting the general circulation, thus making it possible to harmonize the conflicting results of observations on this point.

There seems to be a general counter-action between the cutaneous vessels and those of the viscera and muscles, resulting in the condition of one set being compensated for by the opposite condition in the other.

However, there can be no question that practically all the vessels can, at one time, be either dilated or constricted; this condition is always pathological, instances of which we have in surgical shock and the paroxysms of typical angina pectoris. In connection with the second factor determining blood pressure a few points must also be considered.

The first is that the tone of the vessels under normal condi-

tions depends upon the balance between the opposing action of two sets of nerves—vaso-constrictors and vaso-dilators. We are apt to think of this tonus only in connection with the arteries, but the veins equally with the arteries are under this vaso-motor influence because they also contain muscle fibers.

The *second* is that vaso-motor tone, both local and general, is markedly affected by reflexes of remote origin. Vascular constriction, as a rule, may be provoked by the stimulation of any afferent nerve. There is but one nerve in the body, stimulation of which is invariably followed by fall of blood pressure, and this is the depressor nerve of the heart which we have just considered.

The fall in this case is due chiefly to a dilatation of the visceral vessels; with this single exception stimulation of any centripetal nerve, as a rule, raises blood pressure. In reflex rises of pressure the largest factor in vaso-constriction in the splanchnic area, although other vessels participate.⁸

The abdominal (visceral) blood vessels, the tonus of which is derived from the splanchnic nerves, more than any other part of the vascular system have the greatest regulating effect on the general blood pressure.⁸

The import of this fact is so great that it should never be lost sight of clinically in questions affecting blood pressure, because the chief means of its control is lodged here. The large capacity of this vascular area, including as it does the portal circulation with its branches, is sufficient to accommodate the entire volume of blood. The visceral circulation, intact, can, therefore, counterbalance the most extreme vascular constriction of the rest of the arterial system.

In connection with the *third* factor determining blood pressure, elasticity of the arteries, it is necessary to understand that were it not for the distensibility of the aorta the systolic pressure would be extremely high and the strain on the left ventricle much greater.

The elasticity of the arterial wall is the means by which the energy of the systole is made to maintain the propulsions of the blood during the diastole. This elasticity is great and in animals the arteries have been made to bear, without breaking, a strain twenty times greater than the normal. It is safe to assume no *healthy* artery can be torn by any tension which is possible during life.

In connection with the *fourth* factor determining blood pres-

sure the most noteworthy feature associated with the quantity of blood in the body is the disparity existing between this volume and the total cubic capacity of the arteries, capillaries and veins. This disproportion is compensated for by the tonus or constriction of the blood vessels throughout the body. Should this tone be annihilated experimentally by destruction of the spinal cord, or occur as the result of disease when sudden collapse occurs, then the quantity of blood is insufficient to fill the vessels, the blood is forced out of the arteries into the capillaries and veins until death occurs, the subject practically bleeding to death in its veins. This adjustment of vascular area to the volume of blood makes compensation for variations in quantity easy.

Tappeiner found that one-fifth of the total volume of blood can be withdrawn and within a short time the pressure again reaches a height sufficient to support life. This is, of course, regulated through the mechanism of vaso-constriction. On the other hand, Worm-Mueller has shown that an amount of fluid greater than the total blood volume of the body can be transfused into the vessels without increasing the blood pressure above a point which it frequently reaches under ordinary conditions. This adjustment is made by vaso-dilatation.

In the normal animal variations in the volume of circulating blood disturb blood pressure to a trifling degree only and this is speedily adjusted.

So far as the comparison of the blood pressures in different arteries is concerned, it has been determined experimentally that remarkably little difference in pressure exists in the arteries that are used for clinical investigation of the pulse. It is true that there is a trifling difference, but it is quite negligible.

I would poorly requite your kindness in meeting with us were I to trace the evolution of this instrument through its various stages, or to lengthily dilate upon the physics of the principles upon which its use is based.

So I will barely outline its history.

The first man to perfect a workable sphygmomanometer free from a large degree of inaccuracy was Von Basch, of Vienna, in 1876. It did not become popular because of the distrust of the absolute value of the results obtained. The objection is not so much to the instrument itself as to the method of its application. By it the pressure necessary to obliterate the

lumen of the artery is measured. A small bag containing liquid is connected by tubing with a manometer. This bag is then pressed upon the radial or temporal artery and pressure applied directly against the underlying bone, with sufficient firmness to stop the pulsations in the artery distal to the locality of the bag. The tension within this bag is then read off in millimeters. The varying position of the radial artery with reference to the bone and interference of the tendinous structures, adipose deposits and anomalous positions of the artery, make the results disappointing. This instrument has undergone many modifications and is still used in Europe. Although generally replaced by accurate modern instruments, yet V. Basch must always be regarded as the father of clinical sphygmomanometry.

Riva-Rocci and Hill almost simultaneously in 1897 introduced instruments that registered the amount of force necessary to obliterate the pulse by the method of *circular compression of the limb*. The important feature of these instruments is that an oblong rubber bag or cuff encircles the arm and its distension cylindrically being prevented by a canvas or leather casing the limb becomes compressed in direct proportion to its inflation and finally reaches the point of cutting off the arterial supply of the limb.

The main objection to the Hill instrument is that the record is made by a circular spring manometer graduated in mm.; unfortunately this variety of manometer is not trustworthy unless it is frequently standardized, thus lessening its reliability.

The Riva-Rocci instrument records the tension of the air within the cuff by means of a mercury manometer of cistern form. The glass tube carries behind it a metal scale graduated in millimeters from 40 to 260. The cistern is of heavy glass with two tubes entering, one for the attachment of the inflating bulb and the other for the tube leading to the cuff. This arm-let is a hollow tube $4\frac{1}{2}$ cm. in diameter. The inflating apparatus is a Richardson double bulb, such as is used for the thermo-cautery.

The principal objection to this instrument is the width of the cuff.

It has lately been demonstrated in the laboratory of the University of London by Mr. Lockhart Mummery that the Riva-Rocci sphygmomanometer "applied to the left thigh of a

dog and a mercurial manometer connected with the right femoral artery afforded readings practically identical." In the vessels of the cadaver it has also been found to give readings in accurate accord with known pressures. But when applied in clinical investigations this instrument, the Riva-Rocci with its 5 cm. cuff, gives readings that are higher than those of the mercurial manometer in all cases except children with slender limbs.

This has led to modifications of this instrument and at this time in this country we have three popular and practical instruments from which to choose.

The most accurate sphygmomanometer is that devised by Erlanger. Its freedom from error results from the elimination of the individuality of the observer through the graphic recording of the systolic and diastolic pressures.

Unfortunately, it requires considerable practice to work it easily, and its bulkiness interferes with its availability clinically except in office or hospital practice.

There are two thoroughly practical, reliable and efficient instruments to be had, and, to my mind, so far as results are concerned, the selection can be determined by a "toss up." I refer to the Stanton and the Janeway instruments. One year ago the chief distinction between them was the difference in the width of the rubber armlet, the Stanton being furnished with an 8 cm. cuff, the Janeway with a 12 cm. cuff.

Stanton has lately modified his instrument by furnishing a 10 cm. cuff and on request will supply a 15 cm. armlet. This leaves very little to be desired, in a mercurial manometer, for results in measuring systolic pressures.

As before stated, it has been found experimentally that a narrow armlet requires a greater degree of distension to obliterate the pulse than a wide one. This results, I think, from the greater tendency of the narrow armlet to distend cylindrically and force a groove or gutter in the flesh, in this way adding the force required to displace the tissues to the necessary oblitative force. If this is prevented and the cuff kept flat during distension, then the same amount of force will not be necessary and the reading will be correspondingly lower.

Janeway particularly lays stress on the importance of a cuff of at least 12 cm. width. Sahli, the German diagnostician, does not favor the great widths that are coming into vogue. I quote his words: "It is clear, however, that this

not only makes the instrument more clumsy, but also renders the closure of the cuff more difficult and less secure. Additional errors arise from the fact that such a broad cuff does not act upon an approximately cylindric surface, owing to the irregular contour of the arm. A great deal depends upon the manner in which the cuff is applied. If the cuff is emptied and applied accurately to the skin without the exercise of any pressure, cuffs only 5 to 6 cm. in width remain so flat during inflation that the transmission of pressure is complete and the results are as accurate as they well can be from the nature of the procedure."

Sahli has devised a pocket mercurial manometer, the addition of which to the Riva-Rocci instrument he considers a decided advantage contributing to its portability, and, quoting his own words, "rendering this excellent instrument much handier and more practical."

The essential width of cuff is that which will give the systolic oblitative reading in keeping with what is obtained by the use of the mercurial manometer in the arterial tube.

At this time reports of results should contain reference to the width of cuff and to the comparative size of the arm in order to allow correlating the figures; otherwise they are of no scientific value.

The method of applying the instrument is as follows: The cuff is adjusted about the arm on a level with the heart, snugly but not tight, and the mercury in the manometer is made to stand at zero; with the finger tips of the left hand on the radial pulse the bulb of the apparatus is compressed by the right hand; when the effect of compression on the volume of the artery becomes noticeable then the inflation of the cuff is proceeded with more slowly until the pulse is completely obliterated when the height of the mercury is read off in millimeters.

This is the method pursued, I think, by the majority. Some prefer to rapidly obliterate the pulse and then, allowing the air to slowly escape, carefully watch the scale and note the point where the pulse wave returns.

I do not adopt this method because, in the large majority of cases, I find the point of obliteration 10 mm. higher and the minority always 5 mm. higher than the point of return of the pulse wave. I fail to see why this higher point should be ignored. Some strike an average between the point of ob-

literation and the point of return of the pulse wave. This measure is that of the distending force of the ventricular systole.

Another measurement can be taken. After the point of obliteration is reached, if the mercurial column is allowed to very slowly sink, a point will be reached where, in *some* cases, marked oscillation of the column of mercury will be noticed. If the lowest point of maximal oscillation be marked, you will have what is termed the diastolic pressure within the aorta, caused by the recoil of the blood on the aortic semi-lunar valves through the resistance to the peripheral outflow into the capillaries. In other words, the systolic pressure is the measure of centric force, the diastolic pressure the measure of distal force.

I said that in *some* cases this maximal oscillation of the mercurial column is plainly to be noticed, but there are many in which it is extremely trifling and difficult to locate on the scale. No doubt this is due to the difficulty in overcoming the inertia of the mercury, which is mobile enough, but too heavy, in my opinion, for readily indicating the diastolic pressure.

Dr. George Oliver, of London, has sought to overcome this difficulty by constructing a sphygmomanometer (which he calls an hæmomanometer), utilizing colored alcohol as the indicator, which is far more sensitive to displacement.

The diastolic pressure, in healthy adults, ranges from 20 to 40 mm. lower than the systolic pressure. This diastolic pressure, when obtainable, is a valuable index of the condition of the vaso-motor tonus and the resistance of the arterioles.

If the diastolic pressure remains high, after the exhibition of the nitrites has temporarily withdrawn the vaso-motor influence, then we can see and appreciate the ceaseless and exhausting struggle of the ventricle in carrying on the systemic circulation, resulting, sooner or later, in systolic asthenia.

The balance of my paper, however, will be limited to the consideration of systolic pressures only.

Before considering the variations in blood pressure from the viewpoint of pathology, it will be necessary to know the physiological variations.

The stability of the blood pressure is not so constant as the temperature and it is more liable to physiological fluctuations. Yet the outside limits have been determined, and, excluding the causes of physiological fluctuations, sufficient uniformity will be met with to allow of reasonably accurate comparisons with abnormal readings.

The average systolic pressure in young adults will be found to be 115 mm., the minimum being 100 (called the low normal), the maximum 130 mm. (called the high normal pressure).

In the estimation of the blood pressure several disturbing factors should be eliminated—they are excited psychical states, the influence of body tension or strain and muscular exertion, the influence of food, alcohol and tobacco, and the periodic variations due to respiration, etc.

Excited psychical conditions seem to exert the most powerful influence. Any form of mental excitement, but *anger* particularly, is hypertensive. This hypertensive action of anger harmonizes with the well-known aggravating effect of this emotion on angina pectoris. This psychic disturbance should never be lost sight of when making first observations, because the anticipation of an unknown ordeal should nullify the first reading. I have many times seen this hypertensive effect of the first reading strikingly displayed, falls of 30 to 40 mm. occurring in a short time. Usually, however, the effect is not so great.

The recumbent posture gives the lowest readings and muscular exercise unquestionably raises it.

There is some discrepancy in the results obtained as to the effect of the ingestion of food, but all are unanimous that alcohol lowers blood pressure and that tobacco causes a marked rise.

There are periodic variations in blood pressure, more or less rhythmic, due to several causes. The respiratory waves of variation, during ordinary respiration, are negligible; but a deep inspiration at once depresses the column of mercury while a corresponding rise occurs during expiration.

I have under my care a man of sixty years affected with marked angio-sclerosis and huge hypertrophy of the left ventricle, with reduplication of the second cardiac sound and the production of a perfect "gallop" rhythm. He frequently, in fact almost constantly, presents the Cheyne-Stokes type of breathing, and during the period of apnoea his tension frequently is 155 mm., while during the acme of the respiratory movements it is often 195 mm.

The term Traube-Hering waves has been applied to periodic rises in blood pressure that are observed in prolonged investigations, which extend over a number of respiratory move-

ments. They seem to correspond with similar variations in the depth of the respiratory excursions and are, therefore, in all likelihood due to associated accentuations of activity in the vaso-motor and respiratory centers, thus altering the tonus of the vascular and respiratory systems.

These waves should be borne in mind in all clinical observations, otherwise confusion of several mm. in pressure may be the result.

Mental and physical rest must therefore be secured for reliable results and in making comparisons the pressure readings should be made at the same hour daily.

The deflections from the normal pressure are necessarily in the direction of + and — tension, or, perhaps more euphoniously expressed, as hypertension and hypotension.

In considering the clinical applications of sphygmomanometry it is customary to separate diseases into the two classes of high and low pressure ailments.

We will first give attention to the hypotensive or low pressure ailments.

In this connection it will be well to remember that there is actual hypotension and relative hypotension; or, in other words, a degree of tension may exist that is + so far as tension by itself is considered, but it may be decidedly — so far as the individual is concerned.

As an illustration, I mention a case of septicæmia due to pyelitis engrafted upon granular, contracted kidneys, admitted to the Reading Homœopathic Hospital, with a tension of 185 mm. Hg.; in a few weeks, owing to the ingravescent asthenia, her tension dropped to 130 mm., a high normal tension, but a decidedly low tension for this individual.

Hypotension may be regarded as positive in all adults in whom the systolic pressure falls to 90 mm. We have stated that 100 mm. is the low normal tension for adults and any decrease below this point indicates a hypotensive tendency that becomes positive when it reaches 90 mm. Hypotension is a condition always met with in some affections, occasionally as a complication in other diseases, and always as a feature of the agonal termination of all disastrously ending illnesses.

The causes of hypotension are varied. As might be supposed, all wasting diseases and cachectic states, such as phthisis and carcinoma, induce hypotension because the myocardium, quantity of blood and vaso-motor tone are all injuriously af-

fect. Certain drugs, more particularly the nitrites, through vaso-motor dilatation, lower blood pressure. It is astonishing to note the decided effect produced by these drugs in some cases. To a man of sixty-three years with anginal symptoms and a tension of 210 mm. Hg. I gave 1-50 gr. of nitro-glycerine. In ten minutes the tension fell to 160 mm. Unfortunately this fall is not maintained and the effect is only too transient. Chloroform is another hypotensive drug and low arterial tension always accompanies its use and explains its comparative danger. Ether does not disturb the blood pressure in either direction.

All hæmorrhages, when severe, as might be expected, reduce blood pressure; however, when not lethal, the fall is soon replaced by an upward tendency.

The infections and septic toxæmias, when severe, are accompanied by hypotension. That the process of death is invariably attended by hypotension needs no demonstration. This may be as low as 50 mm., or even 40 mm., and in lingering cases this degree of low tension may persist several days before reaching zero.

There are two conditions, one surgical, the other medical, in both of which hypotension is a prominent feature, so prominent, in fact, that it may be regarded as the essential cause of the condition; I refer to shock and collapse. The collapse resulting in more or less sudden and unexpected death occurring during the height of an acute infection, such as pneumonia, diphtheria or typhoid fever, such deaths that are commonly spoken of as "heart failure" are now regarded by pathological experimenters as resulting from paralysis of the vaso-motor centers in the medulla and cord, the consequence of the production in too large amount of the virulent toxins of the infecting germs.⁹

In sudden death occurring at the height of a diphtheritic infection the myocardial degeneration, it is true, adds to the intensity of the hypotension, but, as the result of laboratory experiments, there is reason to believe that by far the greater part of the fatal hypotension is the result of the vaso-motor paralysis.

These conclusions apply only to the sudden declension of vaso-motor tone that comes on abruptly and overwhelmingly during the toxæmias and not to those deaths occurring later or during convalescence which are the result of other factors.

This variety of collapse then is to be regarded as practically the same condition that obtains in surgical shock, and, when severe, results rapidly in a fatal issue. The vaso-motor centers have been overpowered by toxins and are held in complete abeyance. As the result of the opened arterioles, the blood is rapidly driven from the arteries into the veins, the large capacity of which accommodates the blood, which, from the lowered blood pressure, does not find its way back to the right side of the heart; in consequence, a train of symptoms are developed identical with those of concealed internal hæmorrhage; in fact, in typhoid fever in which both of these accidents, sudden collapse and concealed hæmorrhage, may occur, the differential diagnosis may offer such difficulty that nothing short of an autopsy can decide the cause of death. Such a case of uncertainty in typhoid collapse recently came to my notice. While writing this paper I attended a ruddy-faced lad of seven years, who had a sharp attack of rheumatic fever with typical adult type of joint involvement. On the second day an apical systolic murmur developed with pain. By the ninth day his temperature was normal and the joints were free from pain, and, in consequence, he was regarded as convalescent. This illness occurred during very oppressive heat that disappeared very abruptly during the evening of the first day of his convalescence by the temperature dropping to an unseasonably low point. At 12 o'clock midnight the lad had a chill and by 3 o'clock A. M. he had very severe pain in the right thorax and right abdomen, and was coughing frequently. I saw him at 8 A. M. and regarded him as developing a right-sided pneumonia. The right lung, front and back, and from apex to base, was filled with sub-crepitant rales. The respiratory murmurs in the left lung were normal. He suffered intense pain in the right lung and right side of the abdomen. At 2 P. M. I was called again and found him in collapse, with running pulse, and showing a degree of surface pallor that was startling and in sharp contrast with his usual ruddy appearance. He looked as though he had had an enormous hæmorrhage. He died in a few minutes, fourteen hours from the time of the chill. This case, I think, is an illustration of the vaso-motor paralysis occurring in acute pneumonia. An autopsy was refused.

Whatsoever the cause of the collapsic symptoms, the use of the sphygmomanometer is of great practical importance, al-

though I admit of greater utility from the viewpoint of diagnosis than treatment. There is no other method that will more surely indicate the commencement of abnormal hypotension, and, in all severe acute infections, the interest of the patient will be best safeguarded by making blood pressure observations as often as the temperature is taken. Any intelligent nurse can be taught to make these estimations.

Shock, the surgical condition in which hypotension is the essential feature, is the result of injurious reflex overstimulation of the vaso-motor constrictor impulses. The statement was made that stimulation of any centripetal (sensory) nerve, with one exception, raises blood pressure. The exception is the depressor fibre included in the pneumogastric nerve.

Surgical shock is the result of continued traumatisms to sensory nerves exciting so much stimulation of the vaso-motor centres in the medulla that a point is reached in which exhaustion of these centres occurs and then hypotension results. All injuries cause reflex vaso-motor constriction, but when these have been too frequently repeated a point is reached when the opposite condition obtains. Operations, in which large nerve trunks are involved, can be deprived of their hypotensive tendencies by first *blocking* them with cocaine, as demonstrated by Crile, thus proving the dependence of shock upon the transmission of nerve impulses by afferent nerves.

The value of the sphygmomanometer in shock is the tracing of its development in surgical operations and with it following the effects of the remedial measures. So far as the medical treatment of shock or collapse is concerned, it seems demonstrated that if there is any treatment more absurd than another it is the use, in material doses, of the nitrites either by inhalation or hypodermically. There is reason to believe that deaths have resulted from this practice.

The experiments of Crile, who demonstrated the action of strychnia in violently stimulating the medullary vaso-motor centres, and, that by continuing this stimulation, he could exhaust these centres to the point of producing the profound degree of hypotension paralleled by surgical shock, have led to a great deal of hesitancy on the part of thoughtful surgeons in the use of strychnia in treating shock. In fact, Crile found that the quickest, easiest and most certain method of producing shock in an animal for experimental purposes is by the administration of strychnia.

Mr. Lockhart Mummery has shown a slight response from the use of strychnia as a hypertensive agent in severe shock, but it was soon followed by a fall reaching a lower level than before. To use his own words, "It is possible to draw but one logical conclusion, that in all conditions and degrees of true shock, strychnia is not only useless, but directly harmful, as it tends to increase and to hasten exhaustion of the vaso-motor centres. The administration of strychnia in shock is like beating a dying horse—it may call forth an effort if we beat hard enough, but it hastens the end—and I am convinced that many a case of post operative shock is rendered hopeless by the administration of this powerful drug, which, but for the use of strychnia, might have recovered."

I am inclined to think that our school can offer very little experience with the use of strychnia in shock administered as a similar remedy in doses sufficiently minute as not to medicinally aggravate; from the data quoted it must be homœopathic to surgical shock.

Cook and Briggs have had the best results from combining digitalin with strychnia. The synergy resulting from this combination is far more resultant than either used singly.

The sphygmomanometer has also demonstrated the absolute valuelessness of alcohol as a hypertensive agent; it lowers blood pressure.

A most important and valuable method of counteracting hypotension, in all cases of shock and collapse, is compression of the abdomen. Whenever the innervation of the splanchnic area is held in abeyance increased intra-abdominal tension, whether produced by manual pressure, or the application of a tight abdominal binder so arranged that it will not interfere with the respiratory excursions of the thoracic wall, will, at once and in all cases, be attended with an immediate rise in blood pressure.

Abdominal compression, therefore, is always a valuable auxiliary in the treatment of shock because this compression discharges the accumulating blood from the splanchnic vessels into the inferior vena cava, and this increases the supply of blood to the heart with which it can maintain and augment arterial tension.

The effects of abdominal compression in the hypotension resulting from vaso-motor paralysis led Crile to test the effect of increasing the general atmospheric pressure, by placing

animals in an iron cylinder, with the result that the "blood pressure rose proportionately to the increase in air pressure." ⁶

This led to the construction of a pneumatic chamber in which shock patients were placed and the atmospheric pressure raised; but "this proved to be impracticable." ⁶ Encouraged, however, by his experiments Crile then devised a "pneumatic suit constructed of a double layer of specially made rubber, which, when inflated, exerts a uniform pressure upon the surface, constituting an artificial peripheral resistance. It is so constructed that one or more limbs, or the abdomen may, separately or in any combination, be subjected to pressure by inflation by means of a bicycle pump. The air valves are so adjusted that the rate of decompression may be completely controlled."

The effect of this suit upon the blood pressure may be checked by means of a sphygmomanometer. The general blood pressure may be varied at will within a range of 25 to 75 mm. Hg. The rise in pressure has been sustained as long as twelve hours. ⁶ "By inflation and deflation the blood pressure may, within certain limits, in the heaviest operations, be maintained at a given level. At the close of the operation, and so long as necessary, the blood pressure is watched, and deflation gradually made." ⁶

I now quote Lockhart Mummery: "This method of treating shock by raising the external air pressure and so substituting an artificial peripheral resistance for the lost peripheral resistance caused by the exhaustion of the vaso-motor centres promises to be of great clinical value and to be the most effectual method of treating the condition of shock." ⁴

Abdominal compression can be utilized in differentiating between the hypotension resulting from splanchnic stasis, following failure in vaso-motor tone, and unusually low normal pressure or the hypotension resulting from myocardial weakness. As an illustration I refer to the case of a lady of 53 years, who, for a long time, had been slightly jaundiced. She complained of absolute anorexia and uneasiness in the abdomen with most persistent general weakness. This weakness was unaccountable until it eventuated in symptoms suggestive of attacks of syncope. There were no cardiac murmurs or symptoms referable to the heart. Her arterial tension was 95 mm. Hg. I had a third party lay a bag containing fifteen pounds of shot on her abdomen with the result that the ten-

sion instantly rose to 105 mm., a gain of 10 mm., proving splanchnic vascular dilatation. I have frequently resorted to this measure and can testify to its utility in differential diagnosis. When there is no splanchnic vascular relaxation a weight of fifteen pounds placed on the abdomen does not raise the blood pressure 1 mm.

Typhoid infection, uncomplicated, is invariably hypotensive. The fall in pressure begins in the first or second week, and is generally progressive in indirect ratio with the development of the toxæmia. A most important point in the use of the sphygmomanometer in typhoid fever is that estimations should be made regularly at stated intervals. Fluctuations of short duration will be met with as in health, but a "slowly progressive fall in pressure is evidence of increasing weakness of the vaso-motor centres, and of the danger of impending collapse."⁸ A quick drop in pressure will mean hæmorrhage. All careful observations made by trained clinicians bear out these statements.

But there is one complication of typhoid infection that is always attended with a relative hypertension and this is perforation resulting in perforative peritonitis. The differential diagnosis of this condition is frequently beset with extreme uncertainty, and, because the only practical treatment is radical, it follows that an aid to certainty is most desirable.

I now quote Janeway: "Since the differential diagnosis of perforation is always difficult and the other accidents which come in question, concealed hæmorrhage and acute collapse, produce a fall, this sharp elevation of pressure may often be of inestimable value. A later fall of pressure, as a terminal event in the subsequent peritonitis, must be distinguished from the initial hypertension which can only be detected in continuous records." It is of no use to apply the sphygmomanometer after abdominal symptoms occur, without knowledge of the previous trend of pressure."

By far the most interesting and instructive discoveries and results of clinical sphygmomanometry have been made with the hypertensive conditions.

The pathological limits of blood pressure so far recorded by reliable observers are 40 mm. Hg. as an agonal pressure reported by Hensen, and Cook and Briggs have reported a case of cerebral hæmorrhage with a pressure of 400 mm. Hg. In both cases the narrow 5 cm. armlet was used.

The readings in cases of moderate high tension range from 145 mm. to 170 mm. Hg., and the common readings in high tension cases range from 180 mm. to 220 mm. Hg. and occasionally even higher. These estimations are based on the use of the wide cuff. We have gained much in accuracy in diagnosing hypertension the result of angio-sclerosis. You may think that with the tense pulse, hypertrophied left ventricle and accentuated aortic second sound the diagnosis of angio-sclerotic hypertension is easy and needs no instrumental aid. Unfortunately, the pulse is not always tense and resistant in hypertension, and those cases requiring accuracy in diagnosis are often advanced in years to middle age, when obesity or emphysema so frequently interferes with the result of percussion and auscultation.

It is particularly in the incipient cases of angio-sclerosis that are otherwise so difficult to diagnose, and for which most can be done, that our instrument renders so much aid. I have in mind a man of 24 years, who came to me complaining of a more or less constant pain of a squeezing character to the left of the sternum, extending into the left shoulder and arm, aggravated by motion, deep breathing and particularly by ascending a hill. His apex beat is displaced slightly beyond the nipple line, but there are no murmurs. His radials are soft. His systolic pressure was persistently 135 mm. He was obliged to work far beyond his strength and, while so occupied two years ago, this pain developed. He abandoned this heavy work, but for the past year has had this pain almost constantly. The nitrites lower his tension to 120 mm., but produce a maddening headache. Potassium iodide was given and while writing this paper he appeared at my office with the symptoms of iodism, but for the last six weeks he has been entirely free from pain. His tension now is 125 mm. I don't think there can be any question that this young man is developing angio-sclerosis and that his cardiac symptoms are "angionoid" in character.

The ability to measure the degree of hypertension is a great gain in certainty because of the precision with which the result of medication and the progress of the case can be followed.

Hypertensive conditions offer a wide field for discourse; in fact, the subject is too comprehensive to be more than lightly touched in a paper of this description. I intend limiting my

self to some of the hypertensive features of diseases of the heart and blood vessels, kidneys and cerebral compression.

Paradoxical as it may seem, yet the statement is nevertheless true, age by itself can not be taken as the measure of senility. The phrase premature senility is a tacit acknowledgment of its truth.

Longevity seems to be a question of maintenance of vascular integrity.

No matter how free from degenerative processes the other organs may be, the development of increasing vascular resistance, the result of angio-sclerosis marks the beginning of the end.

One of the surest signs of senility is a progressive rise in blood pressure, the result of increasing peripheral resistance.

This does not necessarily bear a direct ratio with age, but it does so with the intoxications of all kinds, incessant or too strenuous work of the muscular system and abuses of the digestive apparatus.

Hard physical labor and unremitting toil lead to the early production of angio-sclerosis and the more rapid development of this tendency as years pass.

Abuses of the digestive system have a similar tendency, due, I think, to the development of sclerosis of the splanchnic or visceral vessels, thus pointing the epigram that "many people dig their graves with their teeth." This distribution of the sclerotic process is particularly unfortunate and to be regretted because it prevents the heart from shielding itself from the overwork necessary in overcoming the increasing peripheral resistance. You recall that the depressor centripetal nerve of the heart, through the vaso-motor medullary centre, shunts a large amount of blood into the visceral vessels, thus maintaining a fairly normal tension. When this possibility of relief disappears then ventricular hypertrophy is inevitable.

This increasing peripheral resistance with the passage of years is of vital importance. A systolic pressure of 135 mm. and over, in young people, if observed a few times, care being taken to eliminate disturbing factors, is to be regarded with suspicion, and, in older persons, say 40 years, a pressure of 145 mm. is also an evidence of too rapidly advancing vascular degeneration.

At this latter age, 40 years, blood pressure estimations should be made yearly. Should this be persistently at or above

high normal tension, say 145 mm., it indicates the necessity of modifying the habits of life in adjustment with this condition of hypertension.

From my own observations I know that it is possible to reach the "three score and ten" term of life and not have a tension beyond 145 mm., and this, too, in cases where there are no signs of myocardial weakness or failing vaso-motor tone occasioning splanchnic stasis to explain the low pressure.

I am well acquainted with a vigorous man of 74 years, who always lived well without overeating, who was subject to no excesses, the most even-tempered man I ever met; in fact, his placidity was never known to be disturbed by anger or excitement, and who is said by his intimate acquaintances to be the youngest old man they know; at the age of 74 years his tension is 145 mm. and his palpable arteries are soft. Compressing his abdomen with a bag of shot weighing fifteen pounds does not raise his blood pressure 1 mm., thus demonstrating that the innervation of the splanchnic vessels is intact, and, in consequence, that the relatively low pressure is the result of rapid arterial drainage into the capillaries.

Unfortunately, this relatively low tension is too rarely met with at this age, yet, to my mind, it proves the abnormality of the usual high readings in the aged, who are nevertheless well.

It is common to find tensions up to 165 mm. in persons of 60 or 70 years, whose cardiac compensation is well maintained, and who are apparently in perfect health. About this degree of tension no concern need be felt as long as the cardiac compensation is maintained.

But any tension above 170 mm. in the aged is decidedly too high and overtaxes and exhausts the ventricular energy in maintaining this pressure.

There is another danger connected with the high pressure in those advanced in years; in fact, age is not so much the disquieting factor as the vascular degeneration associated with the high tension, no matter at what age this unfortunate partnership, if I may so term it, occurs. No arterial pressure possible in the living animal can rupture a normal artery, but the wall of the sclerosed arteries has a diminished resistance which makes the rupture of the cerebral vessels a possibility which becomes a probability when the pressure rises above 180 mm. When we consider the frequency of miliary aneurisms of the

cerebral vessels the commonness of rupture should excite no surprise.

General angio-sclerosis is always associated with hypertension, even in the stage of broken compensation, except when the final mortal drop in tension occurs. But angio-sclerotic changes are not always diffuse and at times are very irregularly distributed throughout the arterial tree.

The palpable arteries may be hard and the age and mode of life of the individual such that a safe prediction of marked vascular degeneration can be made and yet none of the usual signs of hypertension can be demonstrated, no accentuation of the aortic second sound and no hypertrophy of the left ventricle; in addition, the tension as recorded by our blood pressure indicator may be normal.

Such cases were, until recently, enigmatical. Now they are known to be possible through the escape of the visceral or splanchnic vessels from involvement in the sclerotic process, which allows the vaso-motor centres to guard the heart from excessive work by dilating three vessels. The heart itself, as several times stated, regulates this through the depressor nerve stimuli reaching the medulla. The origin of these nerve impulses is believed to proceed from distension of the ventricular cavities.

I attend a case of nocturnal epilepsy of ten years' duration occurring in a man of 50 years, tall, of spare habit, abstemious in eating and drinking. His temporal arteries are remarkably tortuous and hard, and his radials are in a similar state, a thin skin making these conditions very appreciable. I regarded his epilepsy as the result of syphilitic sclerosis of the cerebral vessels and expected to be able to demonstrate the signs of hypertension. But there is no ventricular hypertrophy, no accentuation of the aortic second sound, and his blood pressure is never above 115 mm. There is but one explanation and that is the maintenance of the integrity of his visceral vessels.

In uncomplicated valvular disease of the heart, as long as compensation is maintained, there is no essential disturbance of the blood pressure. It is practically normal. But when compensation is broken and cardiac insufficiency occurs there is a tendency to hypertension that is all the more harassing to the myocardium.

The renal involvement, asphyxial dyspnoea, oedema and the

psychic state, that is one of anxiety, all contribute to this hypertension. Without these associated factors pure, uncomplicated myocardial exhaustion, *per se*, would result in hypotension. I was called to see a man of 65 years, a carpenter, who is well preserved and was working steadily at his trade until compelled to give up on account of vertigo. As long as he was in the recumbent position he had nothing to complain of, but as soon as he got on his feet he had vertigo, nausea, dyspnoea and pain in the region of the heart with palpitation. There are no murmurs; the first sound was feeble and the impact at the apex so forceless that its relation with the nipple was difficult to determine. There was no oedema. The pulse was 52, vessels were soft, and the systolic pressure was 100 mm. The fifteen-pound shot bag placed on his abdomen does not raise his blood pressure 1 mm., thus demonstrating the absence of stasis in the splanchnic circulation. I don't think there can be any question about the dependence of the low pressure on mural weakness. In this case the persistent use of strophanthus and strychnia during a few weeks raised his blood pressure to 120 mm., with the result that all his symptoms disappeared and he was again able to cautiously resume work.

Any compression of the cerebrum that results in anæmia of the medulla produces a degree of hypertension that the ordinary clinical instruments at times fail to measure. These compressive conditions accompany apoplexy and fractures of the skull, associated with internal hæmorrhage. The cerebral circulation is limited by the tension within the cranial cavity. This being a closed bony case, the entrance of any foreign body or exudation within this case occurs at the expense of the blood circulating in the veins and capillaries.

Compression, therefore, results in local anæmia and the attending phenomena are due not so much to the compressive force as to the arrested circulation. If the compressive force is sufficient to produce anæmia of the medulla then stimulation of the vagus and vaso-motor centres occurs, resulting in the slow pulse and rapid rise in blood pressure. To quote Jane-way: "This advanced stage of cerebral compression is in reality an acute cerebral anæmia and leads to absolute loss of function. Now it is that the medulla responds with an effort to save life. The vaso-motor centres automatically raise general blood pressure above the intracranial tension and its blood

flow begins anew. If the compression goes higher, the vaso-motor centre follows with another rise and so step by step the blood pressure keeps just ahead of advancing brain pressure until such enormous figures as 300 mm. and more are reached."

In a case of self-inflicted pistol shot wound of the head admitted to the Reading Homœopathic Hospital I found the man in deep coma, with stertorous breathing, and a pulse of 52. He had shot himself in the right temple with a 32-calibre revolver. The intracranial tension was forcing brain tissue out of the skull opening.

I used a 10 cm. cuff and found that by raising the mercurial column to 300 mm., this amount of compression of the arm did not in the slightest degree influence the force of the radial pulse. The Stanton scale does not measure more than 300 mm., but the glass tube is 25 mm. longer than the scale, and by raising the column of mercury to the full height of the tube a pressure of 325 mm. was obtained without in any way weakening the force of the pulsations in the radial artery. I very much regret not having been able to obtain a full record of the tension in this case. Unfortunately, a vicious cycle too frequently obtains in these cases. A high blood pressure is absolutely essential to life, but, where hæmorrhage is the cause of the increased intracranial tension, the intravascular hypertension augments the bleeding unless the open vessels can be closed surgically. If this increased intracranial tension be maintained too long a time, the vaso-motor centres become exhausted, the blood pressure falls, the pulse increases in rapidity from vagus exhaustion and death ensues.

Next to affections of the heart, blood vessels and brain we find blood pressure observations of signal value in renal diseases. This might be surmised from our knowledge of the intimate relations existing between vascular and renal maladies. The most interesting relation of blood pressure observations in renal diseases exists in the domain of diagnosis.

In this connection it will be necessary to bear in mind the two chief varieties of renal degenerations, the intra and the inter tubular forms of nephritis. The intra tubular or parenchymatous variety is accompanied by a moderate degree of hypertension; but the intertubular variety, interstitial nephritis or contracted kidney is always accompanied by a high degree of hypertension.

It is astonishing to notice the celerity with which hypertension is established in acute nephritis, particularly scarlatinal nephritis. Other varieties of acute nephritis are not so reliable as instances of the rapidity of the establishment of hypertension because many cases of so-called acute nephritis are merely the flare up of an established nephritis, due to some irritation and already attended with hypertension.

On last Thanksgiving Day (November 30) a well-built, perfectly healthy lad of 12 years had a sharp attack of sore throat, but was not attended by a physician. During the following week he was noticed to puff and bloat, and eight days later (December 8th) I saw him. His parents were more alarmed at his heavy stertorous breathing at night than by his bloated appearance and rather stupid docile condition.

He was anasarcous, had albuminuria with blood casts and passed two pints of urine in twenty-four hours. His pulse was 84 and his arterial tension was 145 mm. By December 17th he was passing between two and three quarts of urine, the œdema was gone and the tension had fallen to 115 mm.

A tension of 145 mm. for a lad of 12 years is decided hypertension, and this developed within eight days from the commencement of the attack of sore throat. When I first saw him he was rapidly approaching the condition of uræmia.

The hypertension at such an early stage must be regarded as toxic in character, the result of vaso-motor stimulation leading to increased peripheral resistance. Acute scarlatinal nephritis is credited by one observer with having caused a rise of 50 mm. within twenty-four hours of its onset.

Another great benefit to be derived from sphygmomanometric observations in the renal degenerations is the ability to detect the decided rise that occurs prior to the development of uræmic phenomena. In fact, all the uræmic symptoms, vertigo, headache, dimness of vision, muscular twitching, vomiting, convulsions and coma, are preceded by and attended with a decided rise in pressure, which, added to the already existing hypertensions of the renal disease, makes a most decided hypertension. The sudden onset of rising pressure in renal inflammation should receive immediate attention as pointing to the imminence of uræmic phenomena.

There is a growing tendency on the part of some clinicians to regard the convulsions as the result of the rise in arterial tension, *per se*, and not as due directly to the accumulating poisons in the blood.

Broadbent says: "Uræmic convulsions are directly associated with high blood pressure and not to uræmic poisons in the blood. Convulsions occur in high arterial tension from other causes."

In this connection it is significant that the most powerful factors in relieving the convulsions in kidney disease are all decidedly hypotensive in their action: chloral, chloroform, verat. vir., the nitrites, venesection, pilocarpine, purging and sweating; the last two, purging and sweating, being eliminant in addition to hypotensive. It is just possible that the hypotensive element of treatment is more important than the eliminant, so far as the convulsive tendency is concerned.

Regular blood pressure observations are as essential to the proper care of cases of kidney disease as is the recording of the temperature in febrile cases.

In fact, the routine use of the sphygmomanometer in all cases of obscure illness is advised because it will, at times, reveal surprising conditions of tension that will at once put the investigator on his guard and head him in the right direction. I have a number of times, with great confidence, ruled out cases of chronic headache with low blood pressure as not uræmic occurring in those who passed too little urine of a low specific gravity.

As an illustration of the helpfulness of the sphygmomanometer in diagnosis, let me relate my experience with a fatal case of coma admitted to the Reading Homœopathic Hospital. A woman in deep coma with contracted pupils, stertorous and slow respiration was being treated by the internes as a case of opium poisoning. When I arrived I had her catheterized, getting 8 $\bar{3}$ of urine, which was allowed to cool. It was distinctly albuminous and the sp. gr., taken carefully by myself, was exactly 1000. Her blood pressure, taken twice, was 105 mm. and 115 mm. respectively. The dichromate of potassium and sulphuric acid test showed the presence of morphine in the urine. The low blood pressure excluded uræmia in spite of the albuminous urine with the sp. gr. of distilled water. It was learned that she had taken 2 $\bar{3}$ of laudanum.

Comments on this case would be valueless because the body was not subjected to a post-mortem examination.

I do not wish to be understood as saying that *all* cases of renal degeneration at *all times* have accompanying hypertension. Uncomplicated interstitial nephritis is always hyper-

tensive, except, perhaps, at the termination of the case, when a relatively low tension may be found; or when associated with phthisis or other severe wasting illness. Then also a low tension may exist.

In none of the other varieties of nephritis does the tension run so high as in interstitial nephritis because the associated vascular sclerosis is not so pronounced. The toxæmia and the sclerotic changes in the walls of the vessels are the factors producing the high tension.

In amyloid degeneration of the kidneys there is no cardiac hypertrophy, no high tension and no tendency to uræmia at any time. This low tension is not necessarily the result of the exhausting, wasting disease upon which the waxy degeneration depends, but upon the absence of the general vascular changes that lead to increasing peripheral resistance.

The use of the blood pressure indicator in the renal degeneration of pregnancy is of extreme value.

There is a want of uniformity in the reports of blood pressure in normal pregnancy. The majority of observations have been made by hospital attaches, who see cases admitted either in labor, or, so shortly in advance of it, that on account of the psychic effect of their novel surroundings and expected accouchement, their readings are not reliable and do not conform with those obtained by general practitioners. The belief in the physiological hypertrophy of the heart and the increased abdominal tension in pregnancy has led to the general belief in intravascular hypertension as the normal condition in pregnancy. I have made a number of estimations during the past year and am convinced from observations made on healthy multipara that there is no essential hypertension in pregnancy. It is difficult to exclude the psychic effect of the condition, but by selecting multipara of phlegmatic temperament I found the usual average tension of 115 mm. In these cases this tension was maintained even during labor, between the "pains," proving, to my mind at least, that the usual rise in tension found in labor is the result of the mental excitement. At the time of the "pain" the muscular effort causes a decided rise in pressure.

But renal degeneration, with its accumulation of toxic material, produces hypertension which becomes significant when a decided increase is superadded.

This may be regarded as so well established that it is a more

reliable guide to the imminence of eclampsia than the amount of albumin or the number and variety of casts. Puerperal eclampsia is *invariably* preceded and accompanied by a very decided hypertension.

As an illustration of the value of the blood pressure indicator in the albuminuria of pregnancy, I refer to the case of a girl of 17 years, a primipara, who engaged me to attend her confinement. I first saw her four weeks before the end of her term. She was œdematous in her lower limbs and face, and passed very albuminous urine. The amount of albumin, to my disgust, I found was the maximum quantity measured by Esbach's albuminometer. Fortunately, her tension was only 155 mm., decided hypertension for her age, but not high enough to make an outbreak of eclampsia likely. The amount of albumin was ominous, yet her tension at no time exceeded 155 mm., and I was able to take her safely through a very tedious and difficult instrumental delivery; if her blood pressure had shown a tendency to progressive augmentation, the induction of premature labor would have been justifiable.

A case of post-eclamptic amnesic aphasia was admitted to the Reading Homœopathic Hospital. The patient was 19 years old and had been delivered in another hospital after having had eighteen seizures. These left her aphasic.

Three days before the outbreak of the eclampsia she suffered from very severe headache. The evening before the development of this headache she visited her medical attendant, who carefully examined her urine and declared the findings negative after boiling and centrifuging it. Yet inside of twenty-four hours she developed the characteristic headache and in less than seventy-two hours was in convulsions.

As is well known, eclampsia may occur without albuminuria, but it is equally true that eclampsia never occurs without excessive hypertension. Therefore, it follows that the sphygmomanometer outranks the test tube as a prognosticator.

Had the blood pressure been taken, I am sure this patient would not have given her physician such an unpleasant surprise.

There is another condition in which the blood pressure indicator can give evidence of great value. In deciding the significance of occasional slight albuminuria, whether to regard it as an evidence of renal mischief or, of the slight import now attached to the cyclical albuminurias, the sphygmomanometer may determine.

The developments of clinical medicine make it impossible to agree with all the dismal foreshadowings of pathological findings. We all know people enjoying fair health who, according to the canons of pathology, should have submitted to burial years ago. As an instance I mention that there is a growing tendency to attach little importance to the discovery of traces of albumin and a few narrow hyaline tube casts in the urine of men of 40 years and over.

This is true as long as this condition obtains without hypertension, or tension greater than his years would lead one to expect.

These findings, formerly regarded as evidences of renal degeneration and ominous in their significance, are now taken to indicate, when not associated with hypertension, that, to use the words of Osler, "the man's kidneys, like his hair, are beginning to turn gray with age." In fact, the latter writer considers it a positive advantage to make this discovery for the reason that it will lead to a modification of diet and habits in consonance with the decline of life.

Life insurance examinations will find invaluable assistance from blood pressure observations. Surely the detection of albuminuria will continue to serve as a basis for rejection; but the failure to find albuminuria in a man of 40 years does not make him a good risk because the most costly disease to life insurance companies (chronic interstitial nephritis) often exists with urine free from albumin. The condition of the arterial tension and of the blood vessels is of far greater importance than the urinary findings in men of 40 and more years.

A case in point came to my notice while writing this paper. A man of 62 years, well preserved, energetic and of fine, healthy appearance, secured a policy in a life insurance company last November. I have been his family attendant for years, and this spring I was called to attend him in a slight febrile ailment. While "feeling his pulse" I was struck with its tension and suggested an estimation of this tension. After he was restored to his normal condition I did so and found it to be 165 mm.

On July 5th of this year he came to my office with the statement that quite recently, on exertion and at night, sudden severe pains occurred in the heart region, extending to the left shoulder and darting to the hand, producing numbness throughout the forearm and hand. I measured his blood

pressure again and found it to be 175 mm. I recognized these attacks as anginal. Three days later he again came to my office, this time in great pain and distress. His blood pressure at this time was 235 mm. Ten minutes after taking 1-50 gr. nitroglycerine his blood pressure fell to 180 mm., and, with this drop, he was instantly relieved from pain. His urine is free from albumin and sugar. The sp. gr. is 1026 and the sediment contains a few narrow hyaline tube casts.

He now carries pearls of nitrite of amyl and it is a safe prediction to make that he will not be called upon to pay many premiums.

I predict that life insurance companies will insist upon blood pressure estimations in their examinations. If they do not they will be singularly blind to their own interests, the contrary evidence of which they have recently so abundantly demonstrated.

In conclusion, I want to say that a glaring fault of this paper is that it is exactly like the flat stone that we all have skittered over the surface of water, lightly touching many places, but not entering deeply. My apology for this superficiality is my desire to make this subject entertaining and inviting, and not tiresome. I have taken advantage of all cases occurring in my practice, private and hospital, during the past fourteen months, that lent themselves to testing the practice and theories of the pioneers in this line of work, and I must acknowledge that, so far as these cases have enabled me to follow, I believe them to be unassailable. I wish to acknowledge my indebtedness to a number of authorities for many of the facts that make this paper possible. They are:

1. Broadbent's Lectures on the Pulse.
2. The American Textbook of Physiology.
3. Kirke's Handbook of Physiology.
4. Lockhart Mummery's Lecture on Shock and Collapse.
5. George Oliver's Lecture on Hæmomanometry in Man.
6. Crile's Blood Pressure in Surgery.
7. Sahli's Diagnostic Methods of Examination.
8. Janeway's Clinical Study of Blood Pressure.
9. Krehl's Clinical Pathology.

CATARRHAL DEAFNESS.

BY

J. W. JORDAN, M. D., WABASH, IND.

ALONG the highway of Father Time are many cozy, home-like, restful inns for the wayfarer. Of the millions who stop at these inns for refreshments and rest, many a noble-spirited traveler along the endless trail has done work in nature study and has discovered great principles and great laws. Kindly he has spoken of this magnanimous thought during his sojourn at these inns, to the common wayfarers. A few understood, but partially. These, in kindly endeavor, conveyed it to the next, but only as they were able to understand it. These, in turn, getting a slighter knowledge of Nature's great truth, carried it to the next, and by adding such explanatory thoughts of their own as would fill up the gaps they all had made in the original; and thus it comes to us and we get our folk-lore or tradition. When it is connected with Nature, Nature's principles and laws, it becomes what is known as superstition, which always contains a kernel of truth.

This superstition thus started, thus transmitted, thus passing and still passing, and thus will be forever passing, becomes a formidable barrier to the progress of science.

This superstition, part truth, mostly untruth, often will not even look through Galileo's telescope or the modern microscope. But instead will go on with its superstition canting that poultices will cure deafness, that irrational procedures, such as applications to disconnected anatomical parts, will cure deafness, or reversing their whim that ear troubles are beyond intelligent treatment; that a running ear is best left alone and that catarrhal deafness cannot be cured.

What a beautiful gap in the battle line against patent and secret nostrum venders this leaves open! Here comes in one of the richest fields of their rapacious work. Anywhere the medical fraternity admit failure there is the richest mine for the secret nostrum men. Likewise, irrational practice of the profession gives a precedence for these monstrous parasites of the human family.

Curability.

Most cases of catarrhal deafness are curable, but only by long and tedious work are many to be cured. Many cases re-

cover of themselves, and if proper treatment were then instituted for the care of nasal and naso-pharyngeal difficulties, the deafness would not return and again become chronic.

These remarks are especially true of the moist and commonest type of catarrhal deafness.

Treatment.

A masterly and readable book like Roosa's in its time and Politzer's of the present time, which latter is well translated into English and sold for five dollars, such a book, with its grand illustrations, its completeness in detail, its reasonableness, its truthfulness, its emphasis of important things and in the latter the enthusiasm of the author will lead any practitioner to correct treatment if he will but read it like he would a book on general diseases.

All can learn to examine. All can use the Politzer air bath to the middle ear. All can learn to use the Eustachian catheter by a little patience and time. All can learn to remove adenoids.

Air douches, and, if needed, removal of the mucous from the middle ear, are the principal parts in treating middle ear diseases of the moist variety.

Paracentesis of the drum head in its lower posterior quadrant freely, and the use of the airbag to clear the cavity repeating the procedure daily or less often is clear of danger, almost clear of pain, and highly to be recommended when the mucous cannot be discharged by the eustachian tubes.

Iodine Vapor.

In the more chronic dry forms of catarrhal deafness I have used iodine vapor for many years with encouraging success.

I read a paper on the use of iodine in middle ear diseases before this society, May, 1892, which was published in *THE HAHNEMANNIAN MONTHLY* July, 1892, detailing the treatment and results in my first series of patients.

Iodine applied locally has a surgical effect.

It is like the knife, the scissors, the curette. It removes redundancy of tissue by emaciating the cells and stopping their reduplication. It prevents, I think, the initial karyokinesis. At any rate, it is common knowledge that iodine taken internally or applied locally causes *extreme emaciation*. I use iodine vapor to the tubes and middle ear to reduce the hypertrophies in the lining mucous membrane and follow it up with subsequent

treatment of the nose and throat disorders which were the cause of the middle ear disorder. I also give constitutional treatment and institute physiological habits for the patient. In the constitutional treatment, I have always used homœopathic medication.

The apparatus I use is Roosa's Nozzle and Politzer's air bag.

Large Silver Catheter.

After a thorough air douche by air bag and eustachian tube with diagnostic tube in place, I have another air bag with the iodine attachment and changing apparatus with one hand, I douch the tubes and middle ear with this vapor of iodine (roll 1-4 to 1-3 dr. of solid iodine in a bit of cotton and place it in the nozzle and attach it to the air bag) two to twenty whiffs till it causes some smarting in nose and throat.

Two years ago Dr. St. John Roosa told me he had not used it, but would commence its use the next day.

Of course, I Politzerize and rarify the air in the external canal with Siegle's apparatus in order to give movement to the ankylosed ossicles, treat nasal, naso-pharyngeal and faucial difficulties. I examine the hearing before and after treatment, generally after each step in the treatment, to ascertain which process adds most to the treatment.

Conclusion.

The anatomy, physiology, pathology, symptomatology and course of the diseases that cause catarrhal deafness and of the concomitant disorders can be gotten only in the extended texts referred to or in lengthened lecture courses. Likewise, the technique of examination and surgical treatment.

I wish simply to draw your attention to the value of extended and accepted works on otology, to the curability of catarrhal deafness by the recent methods and especially to call attention to the vapor of iodine secured by a simple and inexpensive apparatus and to speak against the superstition of the past so often expressed by laity and practitioner of to-day in such words as the following:

"Better let your deafness alone. You may get worse if you monkey with your ears."

TUBERCULOSIS—ITS DIAGNOSIS AND TREATMENT BY MEANS OF PHYSICAL THERAPEUTICS.

BY

DR. H. A. HARRISON, UTICA, N. Y.

(Read before the National Society of Physical Therapeutics, Atlantic City, September 18, 1906.)

In Utica, N. Y., during the past winter has raged an epidemic of scarlet fever of such magnitude that it was necessary to appoint a special health officer to aid in stamping it out. The vital statistics of the city show that from November to July first there were about 576 cases, with 20 deaths. And its nature was such that there are still many people, especially children, with discharging ears, and others with kidney lesions which unless properly looked after and treated will become chronic and perhaps never be cured, all as the result of scarlet fever.

During the same period in the same city there died from tuberculosis and consumption 80, and there was no special comment made of the fact.

In round numbers the population of the United States is 80,000,000, and unless the present death rate from consumption is lessened 8,000,000 of these will die from consumption, and of those who die between the ages of 15 and 50, fully one-third will die from consumption.

Consumption kills as many people as diphtheria, croup, whooping cough, scarlet fever, measles and typhoid fever combined, and yet so used to its ravages are the people that the death of a young man or woman from consumption is looked upon as an unavoidable incident in the natural course of events. This should not be so, for in its early stages 75 to 85 per cent. of all cases are curable and the cure can not only be effected in California, Colorado, Lake Saranac and Liberty, but also in your own home, be that where it may, not, however, by quacks and patent medicines and whiskey, but by judicious and scientific use of God's free fresh air, sunshine and pure water, abundant and good food, including plenty of milk, cream, eggs, meat, both fat and lean, vegetables, fruit and the help of certain remedies with which all of us are familiar.

Rest, in nearly all cases, is one of the most important factors in curing the dread disease, especially in cases where there is any fever.

The diagnosis of consumption is confirmed by the X-ray and the fluoroscope, the narrowing of the intercostal spaces, the lessened movement of the diaphragm, the inflamed and consolidated portion of lung tissue, oftentimes an affected area in a lung supposed to be sound is made out.

All cases should be treated symptomatically—(1) the nose and throat should be treated locally. (2) The stomach should be kept as nearly in perfect order as possible. (3) The heart must be looked after and kept to its highest degree of efficiency.

In addition great help can be found in the X-ray, ozone inhalation, static electricity and high frequency currents. The X-ray is used to hasten fibrosis in the diseased portions of the lungs. Care must be taken not to produce more than a simple engorgement in the lung tissue which is denoted by shortness of breath.

Ozone can be used free or in the form of nebulized ozone in albolene using creosote, oil of eucalyptus or oil of pine needles as indicated. Ozone is supposed to be absorbed by the nebulized oil in the proportion of one to two without any chemical change and the mixture is more efficacious than either alone and it is also good in chronic cough.

There is no agent which will do so much to cure the patient as electricity in its indicated form and used in connection with the other usual methods. It corrects faulty metabolism, acts as the very acme of all tonics, aids digestion and tones up the nervous system.

The vibrator will also in many cases help by keeping the circulation and nutrition at its best.

It was my intention to close the paper by reporting some cases in detail, but I will refrain from doing so because I am told that there are so many other papers very rich in material.

I will say, however, that repeatedly have I had patients gain several pounds a month under treatment, their coughs disappear, red cheeks reappear, and the feeling of strength and health replace the tired, dragged out feeling which so many have.

The scope of this paper is intentionally not exhaustive, simply suggestive and brief in order to bring out an instructive discussion.

ANALYTIC STUDY OF ÆTHUSA.

BY

DR. EDUARD FORNIAS.

(Read before the Homœopathic Medical Society of State of Pennsylvania.)

NERVOUS SYSTEM.

MIND AND SENSORIUM.—(1) Emotional disorders. *Great anguish, restlessness, oppressive anxiety.* Anxiety and apprehension. *Ill humour, vexed and irritable, with crying spells* (CHAM.). Disorders of the intellect. Delirium, frenzy, insanity. *Hallucinations*, sees rats running across the room, sees cats and dogs; tries to jump over the window. (2.) *Semi-comatous condition, after vomiting and purging.* Child lies unconscious, with dilated pupils and staring eyes. *Vertigo*, with sleepiness, cannot lift the head up. In the open air she must lean against something not to fall. When the giddiness ceases the head gets hot. *Mental confusion.* Inability to talk.

SENSATION AND MOTION.—(1). *Sensation as if both sides of the head, chest or small of the back were in a vise. Distressing pain in the occiput, nape and down the spine* > from bending stiffly backward. Violent pain in the brain, as if it were dashed to pieces. Stitches and pulsations in the head. *Tearing, paroxysmal pain in the forehead*, in the temples, in either side (*Hemicrania*). Weight in the forehead, with irritable mood. *Sensation of coldness in the abdomen* (AMBRA GRISEA., CARBO. ANI.). Painful contraction of the stomach. (2). *Infantile spasms*, with clenched thumbs, red face, eyes turned downward, pupils fixed, dilated, foam at the mouth, jaws locked. *Spasms, with stupor and delirium* (BELL.) Tottering gait. *Great prostration, languor, debility*; children cannot stand or hold up their heads. Spasmodic hiccough.

VEGETATIVE SYSTEM.

NUTRITION AND SECRETION.—(1). *Retrograde metamorphism. Malnutrition.* Wasting. Gastroasthenia. *Gastric hyperesthesia. Intolerance of food, especially milk.* Cholera infantum. *Projectile vomiting of curdled milk* (in children), of a milk-like substance, of green mucus, as of a bloody mucus. *Exhausted and drowsy after vomiting.* *Aphtha*, in the

mouth and tongue. Continued thirst. *Emaciation*, with pale, sunken, withered face; blue rings around the eyes. (2). *Salivation or dryness of the mouth*. Moist tongue, feels enlarged. Liver secretion, arrested. *Lochia*, thin and watery. Acid secretion with thrush. Cold sweats.

DIGESTION.—Gastroses during dentition (CALC. CARB.). *Intolerance of milk*. *Sudden, projectile vomiting of curdled milk, soon after nursing*. After the sudden ejection of the milk, the child is exhausted, falls asleep, and soon awakes for a fresh supply. The child dozes after every vomiting spell, or after exhausting stools. *Milk disagrees* (CARBO VEG.) and produces colic, diarrhœa and constipation. Regurgitation of food, some time after eating. *Vomiting of greenish mucus*, or of a frothy milky white substance (*Catarrh of the stomach*). *Shifting flatulence* (PULSATILLA); around the navel, with pinching pain and urging to stool. Painful contraction of the stomach. *Diarrhœic stools*, of a thin, bilious light yellow, or *greenish substance*, attended by tenesmus. Sudden, paroxysmal expulsion of the contents of the stomach, preceded by nausea, and followed by prostration, sopor and morbid appetite (*Hysteria*).

RELATIONSHIP.—ÆTHUSA resembles very much its congener CONIUM. Both produce *nausea, vomiting, headache, giddiness, tottering gait, sopor*, and at times fatal results. In analysing ÆTHUSA, one often wonders, whether its action, like that of CONIUM is chiefly exerted upon the nervous system and not upon the muscles. But of two things we can be certain, one is, that it possesses a powerful influence, of an irritative character, upon the gastric mucosa, and the other that it partakes of *Hemlock's* full action, which is *sopor*. Compare it with CICUTA, CENANTH., CUPRUM., ASARUM., or with IPECAC and OPIUM. In intolerance of milk, with ANT. CRUD., CALC. CARB., PULSATILLA and VALERIANA. In coldness of abdomen with AMBRA GRISEA and CARBO ANIMALIS.

THERAPEUTICS.—In the pathogenesis of ÆTHUSA we find a variety of related symptoms sufficiently important, indeed, to point out with precision its curative range. Its *irritative action upon the gastric mucosa*, leads us at once to *malnutrition* with all its dystrophic phenomena. The *athreptic condition* noticed, under its action, seems to arise principally, if not solely, from the *inability of the infantile stomach to retain and digest milk*. Its sudden expulsion by vomiting, as we have

seen above, is after a short period of slumber and reaction, soon followed by a craving for the very food rejected, and this, I think, does not indicate the existence of any organic trouble. In some cases, however, which I have observed carefully, I have concluded that the intolerance of milk and its sudden rejection, was due, not to gastric irritation directly, but to reflex influence, and this has been particularly the case with adults, where the intolerance of food is not limited to milk, and where the repeated vomiting seldom exhibited any signs of retrograde metamorphism or waste of tissue. In view of what I have stated, the question naturally arises: Is the projectile and persistent vomiting of *AETHUSA* due to a hyperesthetic gastric mucosa or does it depend on reflex bulbar irritation? My answer is, to both, for while there are cases in which no wasting takes place, there are others, especially children, presenting a marked *wasting process*, which cannot be ascribed to anything but to a *destructive metabolism*, as the conversion of matter especially protoplasm into a lower state of organization and ultimately into waste products, is evident through the whole pathogenesis of this drug. At any rate, the *catabolic changes* noticed, particularly in connection with the *nervous system*, point directly to the *stomach* as the organ more frequently affected by *AETHUSA*, a remedy which appears to have a favorable influence upon nutrition, to disintegrate cellular structures and to stimulate the formation of new. In fact, the uses we have made of this drug and the results we have obtained with it abundantly confirm this opinion.

A constant source of error in prescribing is our ignorance as to the *relative value of symptoms*; and *vomiting of curds*, especially, has a clinical significance, much overlooked by some, and overrated by others. In the first place, in infancy, all that is usually regurgitated and vomited is milk, more or less coagulated, of course, for milk cannot be returned by a healthy stomach without being curdled, but what the physician must consider is, the class of the milk taken, the frequency of its expulsion, the size of the curds and the attending phenomena. If cow's milk has been taken, we know that casein from this source readily coagulates into large indigestible masses, rich in fat, while if human milk, the casein then coagulates into fine flocculi containing much less fat and easily acted upon by the gastric juice. These are facts which should

guide our efforts in nursing children properly. Then, again, the stomach contents of a child after half an hour or so, of a bottle of cow's milk, invariably show casein clots still undigested but, apart from these abnormalities, we should never forget that *frequent vomiting* in children is of much less diagnostic value than in adults. The stomach of a child empties itself of its contents so readily, because of the more vertical position of the organ, and absence of the greater and lesser curvature, because of the comparatively slight development of its cardiac sphincter and, in part, no doubt, on account of its excitable nervous system. Regurgitation and even ejection of curdled milk, when the child sucks at all greedily, is extremely common, and we all have observed easy vomiting supervene the shaking motion of the infant immediately after feeding. Moreover, many children who readily vomit the milk without any obvious cause are found, after careful examination, to be suffering from *dyspepsia*, which is usually dependent on *congenital debility*, *insufficient nourishment*, and *early weaning*, singly or combined, and to them we should add the *abuse of farinaceous*, and principally *overfeeding*, the infant receiving irregularly the bottle to quiet its cries, and not having the time to digest during the intervals. In these cases the ejected substances are very acid, and not always due to free H. Cl., but more frequently to the *acids of fermentation*. *Diarrhœa* usually attends them, but the stools are not frequent, they vary in color from yellow to green, and, above all, contain grains of indigested casein.

So, I think that the rationale of *ÆTHUSA's vomiting-therapy* does not rest upon solid bases, for while often the *projectile vomiting* is undoubtedly directly due to *gastric hyperesthesia* and attended by *atrophy*, not infrequently the symptoms clearly indicate that the *origin of the vomiting is cerebral*, not exhausting and enervating the cells, or producing wasting. At least, in some cases under my observation, the *repeated vomiting of curdled milk* was not followed by emaciation, nor associated to symptoms of gastric derangements, or preceded by a sensation of nausea. Sudden, projectile vomiting, such as would indicate the drug, may have nothing to do with the intolerance of milk, and may occur in *neurotic children* or in *hysterical females*. *Persistent projectile vomiting*, then, when not associated with any *gastro-enteric trouble and loss of flesh*, is often the prelude of *cerebral disease*, and has

a great significance; but this is not always the case, for vomiting, even projectile, may be a *pure neurosis*, unattended by other symptoms either of brain or gastric disease, and last for years. The paroxysms of this *habitual or cyclic vomiting*, as it has been called, are severe and exhausting, and pass off gradually after lasting from one to several days. It is seen in children of gouty or nervous heredity. In *cerebral vomiting*, as a rule, the rejection of food takes place soon after it has been taken, and it is decidedly uncommon for cerebral vomiting to occur on an empty stomach. It is an early symptom of *tumor and meningitis*, and combined with headache may anticipate by a considerable time the development of further symptoms. Paroxysms of vomiting (*gastric crises*) sometimes occur in the course of *tabes dorsalis*, but they are generally accompanied with severe pain in the epigastrium and sometimes with nausea.

Nervous vomiting may be alimentary, bilious and lead to hematemesis. When bilious, repeated, and accompanied with a marked febrile state, we should think of *peritonitis* (*porraceous vomiting*), or a cerebral affection, as *meningitis*, for instance. Repeated vomiting of large quantities of *greenish mucus* is indicative of *mucous disease*, which principally occurs after the first dentition. *Pituitous vomiting* is usually observed in *simple chronic gastritis*, but principally in *alcoholic gastritis*, on rising in the morning; it consists of a transparent, serous, acid fluid, often whitish in color, formed by a mixture of the gastric secretions with the saliva, swallowed during the night. It is serous, *whitish*, riziform in the advanced stage of cholera. In *entero-colitis* or *enteritis*, especially in children and in the aged, the gastric irritation is *reflex*, and the vomited matters are serous and discolored. In such cases, the vomiting is associated with *diarrhœa*, aphtha, etc., and as in *acute gastritis*, milk should not be prescribed unless it has been boiled, skimmed and guarded with barley water, or made alkaline with lime water, for, certainly, the resulting curds will irritate the stomach, and sometimes lead the inexpert to an unsuitable remedy. This rule has most application in infancy.

The origin of the reflex, besides the *nervous system* (meningitis, tabes, etc.) may be in the *respiratory tract* (pneumonia, phthisis, whooping cough) and sometimes vomiting seems to depend upon an *alteration of the blood*, producing an

especial irritation of the the vomitive centre (uræmia, eruptive fevers, etc.)

But, *projectile vomiting of curdled milk*, when there is a history of *dyspepsia* and *obvious wasting*, means always a serious trouble, and then the common attendants are, acidity, fermentation, green diarrhœa, and anal eczema. In all cases in which the child is incapable of digesting cow's casein, we should aid internal medication, by taking away the casein altogether and give whey as a substitute. This can be obtained by curdling the milk with rennet and then stirring and straining it. To destroy the rennet it contains, Hutchinson advises to scald the whey before use, and as whey is insufficient alone, because it contains little fat, add one part of cream to four or eight of whey. We should not lose sight of the fact that such intervention is almost imperative, for when a child is progressively wasting and in the road to dissolution, there is withdrawal or failure of the nutritive process and the consequence naturally is *atrophy* or *degeneration*. If our remedies, aided by proper nourishment and hygiene, cannot check these degenerative changes, that is, if a change from a lower to a higher form of tissue is not obtained, the inevitable result is death, and it could not be otherwise, as the system is constantly drained of its water and robbed of its fat and other anatomical elements. The best selected food often fails to support the system, much less to arrest the ravages of catabolism and this when, even in preparing such food, we take into account the milk-digesting capacity of the child. Under such circumstances the child loses ground every day, for, I repeat, a tissue that is not nourished, starves, wastes and finally succumbs. I remember a case which nearly ended fatally, by the view of a homœopathic physician of one of our seashore resorts, who would not permit the addition of lime-water to the milk of a child suffering from *acute gastritis*, for fear, as he stated, of spoiling his case, and who kept on giving *ÆTHUSA* for a repeated vomiting of curds, which he himself created by an improper milk diet, and which the irritable stomach could not support. This is the way some of our enthusiasts understand Homœopathy!

The forcible and inevitable expulsion of the contents of the stomach a few minutes after food has been taken, and yet no decided emaciation being obvious, is a condition frequently noticed in *young women*, who show some evidence of an

hysterical tendency and menstrual irregularity. I have treated successfully with AETHUSA, two cases of the kind, guided by the prostration, dozing and returning appetite, occurring after the paroxysms of vomiting.

Probably in *infantile atrophy* is where AETHUSA has been employed with most success, and next in order comes *cholera infantum*. In both, the intolerance of milk and the exhaustion and semi-comatose condition, after vomiting or stool, have been the leading indications. But no less characteristic is the peculiar craving for a food that has been rejected, which recurs after each paroxysm of vomiting and a short period of repose. The dilated pupils, cold sweat, sunken, withered face, the green stools, tenesmus and the spasmodic hiccough, complete the syndrome of this interesting remedy.

What has led to its employment in *gastritis* is the inability of vomiting, while the severe painful contractions of the stomach last. During *lactation*, while the babe cries, takes the breast with avidity, nurses well, vomits copiously, is exhausted, dozes, rallies, craves for a fresh supply, and does not seem to thrive; the poor mother may be a physical and moral wreck as well, full of anxiety and apprehensions; her lochia is thin and watery, her taste is bitter, she is constipated, her abdomen is tympanitic, and like her child has no power to retain or digest milk. Under these circumstances, both, mother and child, should receive AETHUSA. In *stomatitis*, besides the *painful aphthæ*, *profuse salivation*, and *diarrhæa* or constipation; the *sudden rejection of the milk*, and the *temporary exhaustion and drowsiness*, after vomiting and purging, are again the indications of AETHUSA. It is always called for in the simpler forms, which more generally complicate the process of *dentition*.

Undue excitement of the motor centres occurring at or near the *period of dentition*, and producing general irritability of the system with strong *tendency to spasms*, should direct our attention to AETHUSA, whenever the *gastro-enteric condition* usually accompanying this process should comprise, the *persistent vomiting of milk*, or substance resembling milk, and the short-lived or *transitory exhaustion, somnolence and reaction*, so characteristic of this drug.

It is an excellent remedy in the *diarrhæa of children* due to acidity (*lactic and butyric acid fermentation*), and attended by *gastric hyperæsthesia, intolerance of milk, and sudden ejection*.

tion of this food in a curdled condition, especially if the stools are serous, discolored, containing grains of casein, or *thin, greenish, excoriating the anus, and associated with colic, or tenesmus*.

It has been recommended in *bowel-trouble of old age*, with vertigo, debility and somnolence; and in *gastric derangements of adults*, when the food regurgitates some time after eating, and then the *projectile vomiting ensues*, with tearing pains in the stomach and œsophagus, cold sweat, anguish, distress, and general debility with drowsiness.

It has been an efficacious remedy in the *spasms of dentition* and *summer complaint*, and other gastro-enteric troubles of childhood, with stupor, delirium and squinting; or in *epileptiform convulsions*, with clinched thumbs, red face, dilated staring pupils, foam at the mouth and trismic closure of the teeth. If *delirium* is present it may be attended by *hallucinations* (sees rats, cats, dogs and other animals) and *auto-motor impulses* to jump out of the window.

As seen above, *ÆTHUSA* is essentially a remedy of childhood, but the adult and particularly the aged have been benefited greatly by it. I would not like to close this paper without specially mentioning the *sensation in the back as if screwed up*, which has been so little utilized in our practice.

PUERPERAL INFECTION AFTER ABORTION.—Hellendall (Tübingen) has made a careful bacteriological study of 52 cases of abortion and obtained the following results: In no case of protracted abortion does the uterus remain free from germs. The bacteria enter the uterus either by ascending from the vagina or from the vulva or by means of infection from without from hands or instruments. In either case the germs may be pathogenic, may cause fever and lead to a fatal termination. The ascending of germs is associated with the retention of dead material in the uterus. Without this retention germs do not ascend. The usual manner in which bacteria enter the uterus is by multiplying upon the blood clots hanging from the os. Germs may enter the uterus either between the fetal membranes or they may pass from the amniotic fluid through the amnion into the intervillous spaces. According to the above it is evidently necessary carefully to regard the temperature in protracted and artificial abortion. If fever arises, even slightly, this occurrence is to be regarded with just as much concern as after labor, and this fact furnishes the indication to clean out the uterus and to use disinfecting irrigation. In incomplete abortion the dead uterine contents contain germs for some time before fever arises, and therefore the danger of a septic termination is present; so that the uterus should be at once completely cleaned out.—*Beitrag z. Geb. u. Gyn. Bd. x, 1.*

EDITORIAL

THE QUESTION OF FEES FOR MEDICAL SERVICES.

THE ordinary and usual charges for medical services are approximately the same to-day as they were twenty years ago. Aside from a few limited localities the average charges made by medical men all over the United States are fifty cents for office prescriptions and one dollar for visits at the home of the patient. When it is necessary to drive into the country it is the custom to make an additional charge of from twenty-five to fifty cents per mile one way. The average obstetric fee varies from ten to fifteen dollars.

As we previously stated these fees are practically identical with the fees received by medical men one or two decades ago. During this same period there has been a remarkable era of commercial prosperity in our country. The wages of laborers and artisans has practically doubled in almost all important trades and the hours of working have been shortened. The cost of the food products and of the ordinary necessities of life have increased at a rapid pace so that the cost of living has, conservatively speaking, increased from forty to fifty per cent. During this period the length of time required for the completion of a medical education has been lengthened from two to four years, and this together with the increase in the cost of the students' living expenses has made a medical education three times as expensive as formerly. In other words, while the physician's expense for obtaining a medical education has trebled, his fees as measured by their purchasing power, have diminished fifty per cent.

When we compare the earning power of the average physician with that of the ordinary mechanic or artisan we can see how the relative earning power of the medical man has decreased. Take the wages of the average carpenter, for example, which are sixty cents per hour, or four dollars and eighty cents per day of eight hours work. This amounts in round numbers to one hundred and twenty dollars per month. The average earning capacity of a medical man varies in different

sections of our country from ninety to one hundred dollars a month. In Philadelphia it is about one hundred dollars per month. On this basis we see the average carpenter has the advantage of the average physician by fully twenty per cent. Another important difference must be considered. The wages of the mechanic are net wages—that is they are clear of all expenses incident to his trade. His equipment, too, is either provided by his employer or is of a very simple character. The physician's income on the other hand, must be largely paid out in expenses incident to his profession. For example, the payment of office rent, the purchase of books, instruments, medicines, etc. The social standing of the physician likewise renders him liable to expenses which he cannot avoid, namely, expenses for suitable clothes, the almost necessary expense of employing a servant, and the education and maintenance of his family in a manner suitable to his position in the community. The mechanic or artisan, on the other hand, can wear the least expensive garments without injury to his earning capacity and his domestic affairs may be conducted on the most humble basis without exciting any unfavorable comment. If we give all these facts due consideration we are compelled to conclude that the saving capacity of the average mechanic over and above all legitimate and necessary expenses is *double* that of the practitioner of medicine.

There are two important reasons why physicians receive such small compensations for their services. The first of these is that the medical profession in America is overcrowded, just as it is in France, England, Germany and other European countries. In many of our large cities and other thickly settled communities there is one physician to every seven hundred people. This naturally results in a competition which is destructive to the financial welfare of the physicians.

The second, and undoubtedly the most important reason why medical fees have not advanced, is because physicians have made no united effort to obtain a greater remuneration for their services. Here and there individual men have endeavored to charge higher fees, and if they have been men of extraordinary ability, may have succeeded in holding their clientele. Otherwise their efforts have proved a failure because of lack of support from other physicians. In a number of instances where all of the physicians in a community have agreed to advance their charges the new rates have been accepted

with very little complaint. It is only when the members of the medical profession are in a position to make changes of this kind in a way that carries some power with it that they are liable to succeed in their efforts. The influence of organization in increasing the earning capacity of men in other walks of life, from the capitalist down to the hod-carrier, has been so clearly demonstrated that it is impossible that medical practitioners should fail to observe it.

An increase in fees for medical services would not only be of great assistance to physicians by enabling them to earn a comfortable living and to lay aside sufficient to support them in old age or to provide for their families in case of death, but it would be of advantage to patients also. What physician, who has the least semblance of an extensive practice, can afford to spend half an hour or more in making a thorough examination of some chronic case for the small office fee of fifty cents? And yet it would be impossible for him to demand more in many communities without exciting the indignation of the patient and his friends. At the same time we are of the opinion that many who are in a fairly prosperous condition are willing to pay a suitable fee for careful and skillful attention, and the physician who would receive larger fees should first strive to make his services worth more and then charge accordingly. The increasing number of men who are succeeding in the practice of specialties in small cities and towns demonstrate that good fees may be asked and collected where the services rendered are deserving of them. That a large percentage of the people are financially able to pay proper fees to physicians is shown by the fact that osteopaths and other irregular practitioners ordinarily charge two dollars for an office visit, and apparently have no difficulty in collecting the money.

In conclusion we believe that the decrease in the earning capacity of physicians can be overcome, first, by a united demand on the part of all medical men for adequate remuneration for their time and skill, and second, by an earnest effort on the part of the individual physician to add to his proficiency and thus to demonstrate to his patients that his services are worth the added charge.

THE X-RAYS AS A SOCIAL QUESTION.

AUSTIN, of Paris, has called attention to social danger which may result from the fact that the X-rays are readily capable of producing sterility in the male and female. Experiments on small animals have shown that the rays produce sterility in both sexes in a very short time and without any injury to the skin or tissues of the body. The effect of the rays may go as far as to produce atrophy of both testicle and ovaries, though whether or not this is final has not been proven. It is also a well-known fact that physicians who work with the X-rays continually frequently become sterile for a period of time, which has not been definitely determined, but which may last several months.

When we consider the fact that by this means sterility may be produced in a manner that is painless, effective and which leaves no traces of its application, we can appreciate what a dangerous agent the X-rays may become in the hands of unscrupulous persons. There are only too many females who would be anxious to avail themselves of this method of avoiding conception, and it will no doubt soon be taken advantage of by illegitimate and criminal practitioners. The wide-spread use of an agent of this character would prove a serious menace to the State and it is imperative that laws should be passed which shall prevent the administration of the X-rays except by licensed physicians.

LACERATION OF THE CERVIX IN PRIMIPARAE.—Scheurer, of Muller's clinic in Bern, has studied a series of 99 cases. He finds that lacerations of the cervix mostly attends obstetric operations. More than half of the cases of complete tear were terminated by operative means. Such injuries are also favored by abnormal positions of the head. In the most serious injuries the weight of the children was considerably above the average of that of the children in uninjured cases. Lacerations were also frequent in old primiparæ and in cases of placenta prævia. The effect of too early rupture of the membranes and of contracted pelvis could not be determined. Lacerations usually occur laterally, and the right side was most often and most deeply affected. He was not able to find any particular influence from the several fetal positions, but in cases of too early rupture of the membranes, the first position of the head seems to favor right sided lacerations. Even the largest tears were not generally attended by great hemorrhage. There is no material effect upon morbidity in the puerperium, nor upon involution of the uterus.—*Arch. f. Gyn.* Vol. 77, 581.

GLEANINGS

THE TECHNIQUE OF INTRAMUSCULAR INJECTIONS IN SYPHILIS. Gottheil finds that the most satisfactory method of employing intramuscular injections in syphilis is to use liquid petroleum in which ten per cent. (by weight) of the salicylate of mercury has been suspended. The advantages claimed for the salicylate is that it is not irritating and is the least likely of all the strong mercurials to show "by-effects" and it can be readily suspended in the petroleum oil. Each drop of the ten per cent. solution is equivalent to 1-10 of a grain of the crude drug and about 1-20 of a grain of metallic mercury.

In giving the injection the ordinary hypodermic syringe may be employed, but it is preferable to have a syringe especially adapted for this purpose. It is a great convenience to have a syringe that is fitted with a slip joint for the needle in order that after the needle has been inserted into the muscles it may be disconnected from the syringe in order to see whether there is a discharge of blood. If there is a flow of blood from the needle it is probable we have punctured a vein and the fluid should not be injected at that spot. The injection of the fluid into the vein must always be carefully avoided and this precaution regarding the detachment of the needle should always be observed. The needle itself must be long enough to reach through the subcutaneous tissues into the gluteal muscles and this will be about three-quarters of an inch in thin and one to one and a half inches in a stout individual.

As to the site of the injection the author prefers the gluteal muscles. If the injection causes distress on sitting, he sometimes uses the interscapular muscles. Punctures should be made on alternate sides—Gottheil prefers to give them with the patient in the erect position as the gluteal muscles are more in a mass in this position and the patient is unable to see the manipulations of the operator. The spot for the injection is now cleansed thoroughly with ether and the needle rapidly plunged into the gluteal muscles to the required depth. The amount of pain depends upon the rapidity with which the needle is introduced. After the needle has been introduced to the desired depth it is detached from the syringe and watched for a minute to see whether or not there is any oozing of blood from the lumen of needle. If oozing is present withdraw the needle and make another puncture. If the needle has been placed in a satisfactory point the injection should be made slowly. The needle should be rapidly withdrawn and a piece of zinc oxide plaster applied for twenty-four hours. —*New York Medical Journal*, June 30, 1906.

LOCAL ANAESTHESIA IN THE OPERATIVE TREATMENT OF ANO-RECTAL DISEASES. Gant in this article writes of twelve hundred cases that he has thus far operated upon under local anaesthesia at the clinic, office, home of

the patient, or, when desired, at the hospital. The operations were both major and minor, ranging from hæmorrhoids to colostomy.

While local anæsthesia can undoubtedly be successfully employed in many radical operations, the author's experience has convinced him that it is imperative to administer a general anæsthetic for operations upon the upper rectum, extirpation or resection of bowel, removal of coccyx, and large tumors, extensive prolapsus recti, some of the various complex and complicated fistulæ, very extensive abscesses, necrosis of the coccyx and sacrum, and strictures and congenital malformations above the internal sphincter muscle, etc. General anæsthesia is also necessary for those diseases where a local anæsthetic would not permit the diseased tissues to be sufficiently exposed for thorough operation, when the areolar tissue is loose and allows the solution to rapidly disseminate and when, because of the presence of an ulcer or fistulous opening, a sufficient amount of the fluid could not be retained to cause pressure and blanching of the tissues.

The local anæsthetics employed by the writer include ether spray, ethyl chloride, liquid air, cataphoresis, normal salt solution, plain sterile water, both weak and strong solutions of eucaïne, cocaine, and stovaine.

The first three named have been discarded because of their unreliability in producing the desired amount of anæsthesia, the severity of the initial and post operative pain, sloughing, from freezing the tissues, and because they are not suitable except for minor operations, involving the skin.

Cataphoresis, proved effectual in the same class of operations, but is impracticable, because of the apparatus required and the length of time necessary to produce the necessary anæsthesia.

Sterile water, eucaïne and cocaine were used in the vast majority of cases, and lately, stovaine has been used on several occasions. To cause less discomfort, the water should be at the body temperature. In operations involving the skin, the distention pain is slightly more and lasts longer with sterile water than when eucaïne or cocaine are used, but the post operative pain is less severe in the former.

As to the strength of the solutions, eucaïne and cocaine are employed in strength ranging from one-eighth to one-twentieth of one per cent., while from one-half to one per cent. is used of stovaine. To obviate the unpleasant symptoms of these drugs, which occasionally occur, and the post operative pain, it is best to give the patients a little morphine and keep them quiet for a while before allowing them to move about.

In injecting these solutions, whether it be plain sterile water, eucaïne, cocaine, or stovaine, a sufficient amount of the fluid must be injected to cause the part to be incised or operated upon to turn white. Unless marked blanching of the tissues has occurred, the patient will complain of as much pain as if nothing had been done to avoid it. The solution should not be injected too suddenly nor in larger amounts than is required and the needle should be reintroduced as infrequently as possible. The anæsthetic should be injected slowly under the skin and in a line where the incision is to be made, after which the needle is pushed further in and the deeper tissues injected in the same area.

In anæsthetizing the sphincter for divulsion a long needle is used and the solution deposited in the skin and then the subcutaneous tissues at a point in the median line one half inch from the posterior anal commissure, after

which it should be injected in the muscle posteriorly, then along the sphincter, first on one side and then on the other. A one-tenth of one per cent. eucaïne or cocaine solution is preferred in this operation.

In operations for internal hæmorrhoids, the needle is at once plunged into the centre of the tumors, injecting a sufficient amount to produce anæsthesia and cause them to roll into view. An electric cupping outfit to draw them downward and outward is used by the writer for piles that are hard to get at, and cannot be made to come down by a soapsuds and glycerine enema and when, by the manipulations of the bivalve speculum it fails.

The use of adrenalin in combination with the various solutions used for local anæsthesia has been abandoned by the author, owing to the dangers of post operative hæmorrhage, which has occurred in several instances when this drug was used. Adrenalin diminishes bleeding during and immediately following operations, but hæmorrhage is apt to occur some hours later, owing to the relaxed state in which it leaves the blood vessels.—*New York Medical Journal*, October 13th, 1906.

C. ALBERT BIGLER, JR., M. D.

VASOMOTOR INTESTINAL PARALYSIS FOLLOWING DIPHTHERIA.—RECOVERY. J. Torrence Rugh reports an interesting complication occurring in a child twelve years old during the third week of an attack of diphtheria. The case was one of more than ordinary severity but the local process was promptly controlled by antitoxin (9500 units having been injected in the course of five days) and the child was doing apparently well, with the exception that the pulse was weak and rapid. There developed a sudden diarrhœa which gradually became a continuous flow of brownish fluid with very little fecal matter admixed. This persisted for a week, practically uncontrollably, every means having been used to stop the discharge from the bowel. Among the measures that were tried, opium, the various bismuth preparations and even adrenalin had been tried. As a last resort morphia was administered hypodermatically, more for the purpose of stopping the child's suffering than with the hope of benefiting it. Gradual improvement followed and the child eventually recovered.—*Archives of Pediatrics*, Oct., 1906.

C. SIGMUND RAUE, M. D.

HABITUAL ICTERUS OF THE NEWBORN.—Lagrezze expresses a new view of jaundice of the newborn from having observed this disease in each of three children in two families and which resulted fatally in four instances. The children became sick about the second day, although they appeared to be well at birth, and soon died with symptoms of jaundice, refusal of food, vomiting tinged with blood, some blood in the stools, absence of elevated temperature, no discoloration of the urine, and no convulsions. The conditions found in these cases were somewhat similar to the disease described by Buhl as acute fatty degeneration of the newborn, and also somewhat resembled the disease characterized by Winckel as cyanosis afebrilis icterica pernicioza cum hæmoglobinuria, but the two cardinal symptoms were absent, namely cyanosis and hæmoglobinuria. The author therefore suggests that these children were affected by a toxic process brought about by a congenital intoxication by the poisonous products of tissue changes in the

maternal organism. This would explain the repeated occurrence in the two families; and this view would also be fortified by the fact that in the instances where the children survived, the mothers had been rigidly kept upon a milk diet during the last weeks of pregnancy, which is a means of counteracting the generation of similar poisons inducing eclampsia. The fact that one child was also injured before birth by some toxic process appears to be true because in this instance the amniotic fluid contained meconium.—*Beitrage z. Geb. u. Gyn. Bd. x, 57.*

THEODORE J. GRAMM, M. D.

THE RELATION OF FUNCTIONAL NEUROSES, ESPECIALLY HYSTERIA TO DISEASES OF THE FEMALE GENITAL ORGANS.—Prof. Meyer, of Königsberg, has recently contributed an important article on this subject, which merits the closest attention. Unfortunately we can only give his conclusions, which are as follows. The nervous disturbances which are referred to co-existing gynecologic conditions are often hysterical or neurasthenic symptoms, and are associated with nervous symptoms pointing to the diagnosis of a general neurosis, but which also may be found without gynecologic diseases, and even in men and in children. Experience shows that hysteria, which we are justified in regarding as a psychic disease, now and then appears in the form of physical derangements without there being any demonstrable lesion of the affected organ, or if such is present it is not possible to prove that hysteria is brought about by it either reflexly or through a dissemination of the nervous irritation, and that we may rather without much difficulty find the cause of the physical reaction in the psychic processes which underlie the hysteria. There is not as yet sufficient proof for the theory that the neuroses arise reflexly or from a sort of irradiation. Nervous disturbances are rare in the serious affections of the genital organs. Opinions vary greatly concerning the influence of individual genital changes even among those investigators who place much stress upon the etiological significance of the genital diseases for causing the hysteria; thus for instance, W. A. Freund regards as insignificant all other changes except chronic atrophic parametritis. Permanent results have rarely been attained by treatment of gynecologic ailments which are associated with nervous manifestations. Identical curative results are frequently obtained from other and entirely indifferent procedures.—*Monatsschr. f. Geb. u. Gyn. Vol. XXIII, 1.*

THEODORE J. GRAMM, M. D.

THE PROPHYLAXIS OF HEREDITARY SYPHILIS.—Pinard does not agree with the prevalent and incorrect view that the birth of one or more healthy children is an evidence that the syphilitic father has been cured. Unfortunately there are many points about hereditary syphilis which have not been cleared up. There are two forms in which the disease is hereditary, one in which the child is syphilitic in the truest sense of the word, and capable of transmitting the disease; the other, in which the child only shows certain injuries without being personally infectious. We do not know the cause of this occasional variation in the appearance of syphilis. Peculiar cases have occurred in which several former children were quite healthy, while a child born later showed the unmistakable evidences of syphilis.

How contradictory are such occurrences to the assumption that the syphilitic dyscrasia becomes attenuated with time! Every syphilitic even though having no evidences of the disease should therefore undergo a course of antisyphilitic treatment, not for his own benefit or as a prophylactic against infecting his wife, but solely in the interest of the health of his children. The treatment should be carried out quite without regard to former treatment. It should be continued not only for a month or six weeks, but the man should take iodide of mercury and iodide of potassium for six months, and only then should procreation be attempted. After conception has taken place the wife should also receive the same treatment. The latter should also be repeated before each subsequent impregnation. The author has never seen a failure from this system of treatment. He concludes his article by saying: "Although we may not know the laws of hereditary syphilis, we certainly know its treatment."—*Abs. in Zentralbl. f. Gyn.* 1906, 438.

THEODORE J. GRAMM, M. D.

THE DUTY OF THE PHARMACIST.—The false confidence which leads some druggists into the erroneous idea that they are qualified to prescribe is probably due to familiarity with the methods of the many physicians whose prescriptions are daily compounded and closely observed. The druggist becomes imbued with the idea that, because Dr. A., Dr. B., and Dr. C., all prescribe similar combinations for symptoms which have in many cases been confided to him by the patient previous to consulting the physician, he knows just as much about prescribing for such symptoms as they do.

It is also true that many physicians are guilty of the weakness of falling into a rut in prescribing, having a stock or pet form of prescription which they use day after day with minor variations, and to this procedure is ascribed the origin of many compound preparations which afterward become officially recognized, as Dover's Powders, Basham's Mixture, Donovan's solution, etc., and in some cases, doubtless, these oft-repeated prescriptions have been taken up and exploited as proprietaries or nostrums to the detriment of both professions.

It is also true that some teachers in medical colleges are faddists or cranks on certain combinations, and that all teachers publish in their textbooks and exhibit in their lectures typical prescriptions for illustrative cases, which prescriptions are primarily intended for the guidance of the beginner in prescription writing, but which are too often used as written, with little or no modification, during the entire professional career of the student.

In a recent number of a pharmaceutical journal was published a list of such prescriptions, to which were appended the names of the prescribers, most of whom were eminent in the profession of medicine, together with the name of the disease or the purpose for which the combination was prescribed. A glance at some of them will show how errors may thus be perpetuated, and harm done to both medicine and pharmacy, and it is not beyond the bounds of possibility that some nostrum manufacturer might take any one of them and put it up as a secret preparation, stating with entire truthfulness that it had been used and advocated by a prominent member of the medical profession in the alleviation or cure of a given condition.—Charles H. LaWall, in *Am. Jour. Pharm.*, October, 1906.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY JOHN HUTCHINSON, M. D.

ANTIMONIUM CRUDUM.—By S. H. Aurand, M. D., Chicago. Antimonium crudum has a therapeutic scope which may be represented by the figure 4. First, the mental symptoms. Second, the symptoms of the mucous membranes. Third, the gouty or rheumatic symptoms. And fourth, the skin symptoms.

The picture of this remedy is not hard to retain if we try only to remember the most prominent or characteristic symptoms.

First. The mental symptoms which are peculiar to it are: The absence of a desire to live. Life seems a burden to the patient, she says, "Oh doctor if I could only die." There is a loathing of life. Then too the patient has over-excited, ecstatic or intensely nervous spells, which cause a peculiar susceptibility to mellow or bright light. The light of the moon, from an open grate, or shining through stained glass, seems to have a peculiar effect. Especially is this markedly shown on hysterical young females. They are strangely moved to disorderly outbreaks of the affections. "Sentimental mood in the moonlight." Looking into the bright light of an open grate will aggravate many symptoms, such as nervousness, headache, whooping cough, etc.

Second. The second set of symptoms are those of the mucous membranes, and are usually of a catarrhal nature. The stomach seems to be the organ which is most effected. "All symptoms seem to center about the stomach." With all complaints there is more or less nausea and vomiting. The tongue is covered with a thick milky-white coat, which is markedly characteristic. The patient has loathing of food—everything disturbs the stomach. The thought of food or the smell of food causes nausea and vomiting. The patient will retch and gag with the least provocation. The stomach feels overloaded, distended and full even when empty. Headaches, rheumatic attacks or catarrhal difficulties are liable to suddenly terminate in a spell of continued nausea and vomiting. Cold bathing, cold, wet weather and sour wines or foods always aggravate the symptoms of the antimonium crudum patient.

Third. The gouty or rheumatic symptoms, so far as the pains are concerned, are not very characteristic. The chief guiding symptoms are,

worse from cold bathing, worse in cold, damp weather, worse from taking sour wines or stimulants and better from a hot bath.

Then too, the gouty symptoms are liable to change suddenly into a fit of persistent nausea and vomiting.

Fourth. The skin symptoms are peculiarly striking. The skin becomes unhealthy and tends to become callous, crack, ulcerate and grow warts. The nails and hair are rough, hard, brittle and poorly nourished. Hard, horny excrescences grow from under the nails. Hang-nails are abundant and extremely painful. Little, horny, hard, rough places appear on the ends of the fingers. The slightest pressure will produce a callous or sore place. Therefore the soles of the feet are liable to become thick and sore. The large calloused surfaces have small corn-like centers which are very sore and sensitive. If pustules appear they always have an inflamed and very sensitive base. These patients have periods of great exhaustion when they perspire copiously from the least exertion, from exposure to heat or at night.

The above are the principal factors in the antimonium crudum individuality. There are many conditions and symptoms which naturally will associate themselves. Remember the mental symptoms, and then inquire into the deep seated symptoms of the mucous membranes, the gouty conditions, skin troubles and finally the aggravations, and you have it.—*The Clinique*.

WARTS AND CORNS.—Some one says that "the best and most effective remedy for warts and corns is sea water. When sea bathing is not possible, warm foot baths of sea salt will take its place. If used daily, at the end of a fortnight the corns will peel off. Warts are treated by soaking the hands in warm sea water twice a day for ten minutes. Cauliflower warts on the scalp yield to a compress of sea water left on all night each night for two weeks."

[This treatment may doubtless be successful when appropriate to the patient. Otherwise the warts and corns will not be affected.]

THE BASIS FOR THE PRESCRIPTION.—Many successful therapists never regard the physiological action of a drug, except in a few instances, as a basis for prescribing, and they have invariably noted that such prescribing is opposed to good therapy. The profound impression is not that which is usually curative. It is the silent changing of a diseased course toward the normal that cures most speedily and with the least to regret from the by-effects or after-effects of drugs. Opium produces profound narcosis, yet is it not a fact that physicians scout all around opium in search of other hypnotics rather than to invite the arrest of secretions that invariably follows the administration of opium and its salts? True, the desire may be to produce sleep in the sick patient, and opium will accomplish that result. But if it produces other deleterious effects, has it exerted "the best therapeutic action?" Again, even when so employed, does it not often mislead one from seeing the true condition of the patient, particularly in masking pain and tenderness so that the necessity for remedies really indicated is not recognized? *Neither is the patient's condition made any better by the enforced sleep.* What we most need is a recognition of the fact that there

is a *therapeutic action* of drugs, and that that action seldom accords with the physiological action so-called.—*Eclectic Medical Journal*.

[The italics are ours.]

IF LOWER CEILINGS AND PATENT FIXTURES for living rooms appeal much further to the space-contracting and space-occupying passion and ingenuity of architects, furniture designers and builders, the human lungs will have soon to fight for necessary air space in which to live. Beds in dining room, kitchen ranges in bed room or both, and movable dressers and escritoirs in closets, leave only one more economy space contrivance to be provided, and that is the introduction of compressed oxygen devices for the ready remedy of asphyxia with perhaps an automatic physician's call contrived to act as the air gets below the life-sustaining point during sleep.—*Alienist and Neurologist*.

PICRIC ACID.—The eyes are sore and ache after mental labor. Can not read because it makes the head so tired. A feeling of confusion in the nape of the neck. Pain in the occiput, possibly extending down the spine. Headache and nausea on moving the head. Is so tired; can not think or study; legs are so weak and heavy it is with the greatest effort they can be moved.—*Hom. E., E. and T. J.*

FOR RIGGS' DISEASE.—A manifestation of "gout"—brush vigorously and frequently the gums and teeth with a hard tooth brush liberally supplied with 50 per cent. alcohol. Give internally ten drops of tincture of urtica urens in a drink of water, night and morning. If the dentist says there is calcific deposit follow the above with Hecla lava 30. four times a day.—*Hom. E., E. and T. J.*

SQUINT should be treated as follows. 1. Correct the refraction.

2. Treat the amblyopia and re-establish simultaneous vision with the diploscope.

3. Prevent suppression.

4. Correct the squint by operation, only as a last resource.—*Hom. E., E. and T. J.*

COMPRESSES.—By E. P. Felch, M. D. In discussing the subject of compresses, we have, first, the hot compresses, and of this variety we need say but little, because of the familiarity of all physicians on the subject. They can be applied to any portion of the body, and are useful for the reduction of congestion, for the alleviation of pain, and to reduce swellings and indurations. They will also hasten the absorption of exudates and, withal, are a very useful hydropathic measure.

Two varieties of the hot compresses, we wish to speak of particularly. One is the hot spinal compress, which is extremely useful in reducing hyperesthesia of the spine. They can be used as often as three or four times a week, the duration of the treatment being from ten to twenty minutes at a sitting. In painful and delayed menstruations, hot compresses over the abdomen or over the lumbar region will afford as much relief as the hot sitz.

The next compress of particular importance is the compress of the liver

and stomach. Used in this situation, they will greatly increase the flow of bile and aid in reducing hypereamia of the liver and restoring the functions of this organ.

It is needless to add that hot compresses should be covered by dry applications to retain the heat as long as possible. They should be renewed as often as every ten minutes, and in cases of severe pain as often as five minutes.

Very lax methods are often observed in the use of these compresses, and it is no uncommon thing to find them being applied at a temperature so low that the compress is of no use.

Referring to what was said concerning the primary and secondary action of heat, we will recall that the *secondary* effect is what is sought, we wish to relieve congestion or inflammation, and since it is the secondary effect which we wish to obtain, we must have the compresses as hot as can be borne, and frequently repeated.

The cooling compress is prepared by wringing out of cold water and applying to the diseased parts without any covering, the object being to keep the temperature of the parts low. These compresses should be re-saturated quite frequently. In inflammation of joints they are particularly useful, and, in fact, are very beneficial in all inflammatory conditions. They are easy of application, quickly applied, and are usually very agreeable. There should not be water enough let in them to dampen the surrounding clothing.—*The Medical Counselor*.

POWER OF ATTENUATED DRUGS.—There are those who are skeptical as to the value of attenuated drugs. They cannot see how "so little can help." Their materialistic minds associate effects with large masses of drugs. That has always been the main objection against homœopathy.

Just now our cause is receiving much aid from scientific investigations. That infinitesimal and (by methods now known to the chemist) undetectable quantities of drugs can exert a great power is being demonstrated more clearly as the time goes by. Perhaps the day will come when science will show that we were too moderate in our assertions of the mysterious force inherent in infinitesimal quantities of material substances. Let us look at a few of these facts:

I. Dr. Robin, of Paris, experimented with solutions of gold corresponding to our fifth centesimal potency (10 x), and found that "almost infinitesimal doses are endowed with very great activity." Here are some of the changes noticed:

1. "An increase of urea, which may increase 30 per cent."
2. "An increase in the coefficient of nitrogenous utilization."
3. "An increase in uric acid, which may reach high figures, as much as three times the initial quantity."
4. "A positive flush of urinary indoxyl."
5. "A decrease in quantity of total oxygen consumed."
6. "A temporary rise of arterial tension."
7. "A profound modification of the blood-globules. An injection is followed after several hours by manifest leucocytosis, slight in a healthy person, intense in infectious disorders, habitually associated with leucocytosis. Decrease in the number of leucocytes begins at the end of an hour and lasts

for a period of time, varying from one to two days. The red corpuscles do not seem to undergo any modification."

He makes the following deductions, which confirm what homœopaths said a hundred years ago:

1. "Metals in extreme subdivision are capable of remarkable physiologic action, out of all proportion to the amount of metal used."

2. "Such metals, acting in doses which therapeutists considered heretofore as ineffectual and useless, by making a profound impression on some of the chemical processes of life, whose deviations are connected with many morbid conditions, are probably destined to take an important place among the remedies of functional therapeutics."

II. Pure water poured into copper or aluminum vessels does not show any traceable quantity of these metals. And yet, when inoculated with typhoid bacilli, these have disappeared in about three hours. It is well known that they ordinarily retain their vitality in water for a long time.

III. Or put argentinum nitricum 1-1,600,000 in water and the growth of the aspergillus niger is inhibited. Carry the dilution up to the incomprehensible figure of 1-1,000,000,000,000,000 (15 x dil.), and filaments of the spirogea sustain life only about four minutes. Mercuric chloride shows the same action.

It might be interesting reading to have a report of all these experiments now in progress. And the limit has not yet been reached. If now we know that attenuations which were a few years ago considered devoid of all medical and chemical properties, by the scientific men, are capable of influencing life, what may future discoveries reveal? We expect to see the efficacy of moderately attenuated homœopathic remedies fully proven by scientific, non-medical researches. And what then? Well, the usual thing will occur. They will present such results as recent scientific discoveries, ignoring the fact that homœopathy knew them a century ago.—*The Medical Forum*.

"THE EXCESSIVE USE OF TOBACCO, especially in the form of cigarettes," said Dr. Mohr, in addressing the International Homœopathic Congress, "dulls the intellect, impairs nutrition, seriously affects the eyes, causes functional and organic heart disease, and in other ways contributes to physical and mental degeneracy. Boys who smoke cigarettes much are prodigious liars and thieves; have been found unmanageable at home and at school, and judges of the Juvenile Courts have declared that of the incorrigible class of boys not one has been found who did not use cigarettes.

"To many male adults the moderate use of cigars may be allowed, but the benefit to be derived, if any, will come when smoking is restricted to hours of leisure and those immediately following a meal."

At the meeting of the Société Française D'Homœopathie, March 10th, 1906, Dr. Congosto, Consul for Spain at Bordeaux, and a graduate of the Hahnemann Medical College of Philadelphia, was unanimously elected a member of the society.

FOREIGN LITERATURE

CONDUCTED BY E. FORNIAS, M. D.

PEDIATRIC CONCLUSIONS AND PRECEPTS.—(*Continued.*)

1. The clinical study of gastro-intestinal troubles, in first infancy, comprises: (1). Mild, sub-acute gastro-enteritis, due to excessive feeding in infants reared at the breast. (2). Acute gastro-enteritis (toxic-infections) of infants fed by the bottle. (3). Chronic gastro-enteritis (atrepsia, rickets). Legrand.

2. The digestive troubles, in children reared at the breast, are almost always due to excessive alimentation, which may be injurious by the frequency of the feeding or the great abundance of the teats. These troubles are characterized by the three following symptoms: Regurgitations, diarrhoea and loss of weight.

3. The regurgitations really constitute the first stage of the pathological condition: Indigestion of functional origin. They are due to excessive teating; the infant having taken the breast too long rejects by the mouth part of the milk, which comes up without effort, not curdled, creamy; and without lumps, or acid or acrid odor.

4. The diarrhoea presents the following characteristics: (1). The stools are frequent (6 to 10 daily). (2). They contain undigested substances, poorly dissolved, or yet fatty. (3). They are inodorous. (4). They only contain a few bacterium coli.

5. The loss of weight is attended by a slight weakness of the general system. The characteristic of this infection, on a small scale, is the absence of reaction of these digestive troubles on the general condition. It is entirely localized in the digestive tract. Lesage.

6. The acute gastro-enteritis of bottle-fed children may assume three forms: (1). Mild acute gastro-enteritis. (2). Grave-acute gastro-enteritis (pyretic type). (3). Acute algid gastro-enteritis (cholera infantum).

7. The acute, mild, gastro-enteritis is characterized by—acid infectious vomiting of curdled milk, formed of large masses of a whitish-grey color, floating in an acrid liquid of pungent odor, occurring half an hour or three-quarters of an hour after nursing, painless or painful, increased by a fresh injection of milk (demanding a serious diet);—green diarrhoea, composed of liquid, greenish, or slate-color stools, very acid and emitting a fetid, offensive odor; it may be accompanied with abdominal tympanism and colic—the loss of weight is attended by general emaciation, with slight, fleeting paroxysms of fever (38°).

8. The febrile, acute, gastro-enteritis of the bottle fed, is characterized by: (1). Digestive symptoms of the same nature as those of mild cases (predominant vomiting and diarrhoea). The fetid odor of the stools and

the abdominal distention are more marked. (2). Sudden aggravation of the general state; the distinctive phenomena being: Contracted or typhic incomplete facial expression, hot dry skin, violent thirst, early agitation followed by emaciation, fever oscillating between 38° and 40° , pulse 90, 100, 110; progressive loss of weight. The malady lasts 4, 5 to 6 days and during this time the digestive troubles persist and the signs of infection increase. The nursling dies as a typhic; recovers after a diarrheic crisis, often of green biliary stools, or presents pulmonary complications. Sometimes there are signs of amendment and, after 2 or 3 days of apyrexia, a new rise of temperature takes place, (relapsing form), or the infection of the algid type commences.

9. The acute, algid, gastro-enteric form (cholera infantum) is a disease of bottle-fed children and prevails in summer time (summer complaint). It may start at once without previous illness; the child takes ill suddenly with digestive troubles of a choleraic type and algid phenomena; or the malady may supervene during the course of a serious infection of the febrile type.

10. The symptoms of cholera infantum are: (1). Vomiting, frequent, bilious, greenish, very acid, with burning thirst, muguet and dry tongue. (2). Diarrhœa, serous, watery, acid, inodorous or slightly ammoniacal, abdomen soft, sunken, flabby, wrinkled, insensible. (3). Cyanosis, altered features. (4). Peripheral hypothermia (36°) contrasting with the central temperature, which does not descend lower than the normal and even presents an ante-mortem elevation (38.5° — 39°). (5). Collapse, with incessant whining; thready pulse, dropping to 60, 40, 30 beats. 6. Real emaciation, though not very visible on account of the hard scleroderma (skin indurated and feeling like leather). Depression of the fontanells, especially the anterior; superposition of the cranial bones, Scanty urination.

11. Chronic gastro-enteritis. Athrepsia. The simple chronic gastro-enteritis of the suckling is characterized: (1). By attacks of diarrhœa and vomiting, separated by intervals of obstinate constipation. (2). By the development of a large, flabby abdomen, corresponding to a lengthening of the intestine. It is a trouble of long duration and complicated by super-added infections (broncho-pneumonia, pyodermitis, otitis, thrush, etc.). It ends in a gastro-intestinal cachexia in children above 4 or 5 months of age (extreme emaciation, muscular atrophy, active disassimilation and denu-trition, hypertrophy of the liver and spleen, polyadenitis, &c.).

12. Athrepsia is the special cachexia, following chronic gastro-intestinal infection in nurslings under the age of three months, and to this infection are added others of secondary origin. Athrepsia is a toxic cachexia; the athreptic child is, above all, an infected child; inanition, autophagy, denu-trition play a secondary part.

13. Athrepsia comprises three periods: (1). Gastro-intestinal or pre-athreptic period, characterized by mechanical troubles resulting from alimentary overloading. (2). True toxi-infectious period, where the dyspeptic infant of the first period becomes principally an infected creature, and by this persistent and general infection, the athreptic cachexia gradually develops, the more so if secondary infections come to complicate the primitive malady. (3). The cachectic period is the period of confirmed athrepsia, and may present the following complications: Multiple sub-cutaneous

abscesses, pyodermitis, ecthyma, muguet, otitis media, broncho-pneumonia, purpuric eruptions.

14. Recovery is complete at the onset of athrepsia, but the end is fatal in confirmed athrepsia. The prognosis and duration depend on the auto-phagia and the intensity of the infection and complications. A rapid, progressive wasting indicates death. A temperature of 36° or with ascending or descending oscillations, is of bad omen.

15. Rachitism is of alimentary origin. It is a toxic osteitis due to an infection or intoxication at the habitual point of departure in the digestive canal. Rachitism begins always by a gastro-enteritis, and all neglected and chronic gastro-enteritis ends in rachitism.

16. Rachitism is always preceded by digestive troubles belonging to the common gastro-enteritis, characterized by attacks of diarrhœa and vomiting, separated by intervals of constipation. After some alternatives of diarrhœa and constipation, the large, flabby abdomen commences to develop; the general condition is altered and the cachexia assumes two forms; either the child loses flesh from the start (cachexia maigre), or it increases in weight and becomes obese (cachexia grasse). The fat cachexia often follows the thin cachexia.

(*To be continued.*)

THE TREATMENT OF SCIATICA—*Continued.*

Chamomilla.—When the left side is affected, there is excessive sensibility and irritability of fibre and the patient acts as if out of his mind. The pain is of a drawing character, from the hip to the knee and from the tuberosity of the ischium to the soles of the foot; or it is of a drawing, tearing, excruciating nature, which becomes intolerable at night; is worse at night in bed, and from the least motion. There is a feeling of numbness in the affected parts after motion.

Colocynthis.—Sciatica of the right side. Acute, severe pain in the sacral region, which compels the patient to keep perfectly quiet as it becomes worse at each movement; stitching, cutting pains from hip to knee, or like lightning from sacrum to heel, worse in the evening and at night, with thirst for cold water. The pain sets in suddenly, is constant in character, becoming intolerable in paroxysms; it is sometimes so severe as to make the patient limp, and always leaves numbness after. It is worse from touch, cold, motion, anger, and indignation, and better while at perfect rest, and from warm external applications. There is a tendency to shortening of the tendons.

Eupatorium perfoliatum.—Sciatica of the left side. Severe shooting pains in the course of the sciatic nerve, producing a palsied sensation, especially after motion. Neuralgia of the right shoulder or of the right knee, passing over to the left side. Neuralgic pains from below upward, mostly on the left side of back and hip. Gnawing in hip joint, legs feel weak and tired, more so the left.

Gelsemium.—Obstinate sciatica. The pains increase by rest and particularly on starting to walk. Burning pains increased at night, compelling

patient to remain in bed, without walking. Severe paroxysmal pains, relieved from sweating. Pain in the sole of the feet while walking.

Gnaphalium.—Intense, deep, lancinating, burning pain along the posterior part of the sciatic nerve (without action on crural neuralgia), following its larger ramifications. Feeling of numbness in place of the pains, making exercise very fatiguing. Worse by lying down, from motion and walking, and better by sitting. Right side principally affected.

Ignatia.—Chronic, intermittent cases which are better in the summer and worse in the winter occurring in patients of a mild, melancholic temperament. The pain is either of a hammering nature, as if the coxo-femoral articulation would break to pieces, or intermittent of an incisive or throbbing character first tertian later quotidian. The pains may be attended by chilliness with thirst, followed by heat, especially in the face, without thirst.

Iris versicolor.—Cases complicated at times with gastralgia or enteralgia. The pain is shooting, burning, making the patient limp and affecting the posterior femoral muscles. Flying pains along the left sciatic nerve to foot, greatly aggravated even by moderate motion. Shooting-burning pain in the right shoulder.

Kali bichr.—Sciatica of the left side, principally in men (Puls. for women). The pain is relieved by walking and flexion of the limb, and worse by standing, sitting or lying down. It extends from hip to knee and pressure causes the pain to shoot along the entire nerve. Erratic pains of various kinds, pains that come on quickly and subside soon, and jerking-aching pain in the hip, worse in hot weather. (Ignatia better in hot weather.)

Kali phosph.—Sciatica, with dragging pain extending down the back of the thigh to the knee, and attended by torpor, stiffness, great restlessness and nervous exhaustion. Dragging, paralytic pain in the sole of the foot.

Lac. can.—Rheumatic pain in the left hip and along the sciatic nerve. Intolerable pain through the supersacral region, extending to the sciatic nerve, and preventing sleep and rest. Erratic rheumatism.

Lachesis.—When the pain is constantly changing places, now in the head, then in the teeth and later in sciatic nerve, and attended with nervousness, palpitations of the heart, flushes of heat, and constipation. Intolerable itching and burning pains extending from the hip to the foot. Pain in the right sciatic nerve, worse by the least motion. Suppressed eruptions on the legs come back in abundance. Patient feels better when quietly lying down.

Ledum.—When the pain extends upward from the foot. Pinching-drawing pain in either hip joint, descending along the posterior surface of the thigh; pressure in the posterior region of the thigh, with sensation of constriction of the muscles, the affected limb is cooler than the rest of the body. The pains are worse when getting warm in bed, and when touching the parts. The left side is more affected with weakness and heaviness of the parts. Pains attended by sweating of the feet and limbs (?); extreme tenderness of the soles of the feet; itching of the dorsal surface of the feet and ankles at night, and lack of vital heat.

Lycopodium.—For chronic cases, with burning and stinging pains and complete remissions. The affected limbs are stiff and weak; worse by rest, and slightly relieved by motion, but diminished when one puts a stop

to the motion. Painful muscular twitchings; constipation, abdomen filled with gas; urine high colored, turbid, with red sandy sediment. The pain is increased by pressure on the affected part, when sitting or lying on it, and becomes intolerable while standing and cannot straighten the leg. The pain returns periodically every four days.

Mercurius.—When the pains start from the hip to the knee, of a drawing character along the whole thigh, leaving a painful weakness which hinders walking. Feels as if the flesh were torn from the bones. Sensation of internal heat and external cold. Worse from touch, motion, in the evening and at night; better in the open air and after the break of day.

Nux vomica.—Drawing-tearing pains from below upwards relieved by hot water, with stiffness and contraction of the limb. Great pain along the affected limb down into the foot. Sensation of paralysis, with coldness of the parts affected; can lie best on the painless side (*Bryonia* reverse); worse early in the morning and during stool. Constipation.

Plumbum.—Chronic sciatica, with muscular atrophy. Continual constrictive, tearing pains, better at night, from warmth, motion or a slight pressure; relieved by massage. Hectic fever, dry cough and great exhaustion.

Ranunculus.—Sciatica, especially in women, pains worse by moving about, yet not relieved by lying down. Pains worse in rainy, stormy weather. Stitching-burning pains, radiating from the dorsal region of the spine.

Rhus tox.—During the progress of the affection, especially when caused by exposure to wet, or straining in lifting. Stinging, burning, tearing pain, with numbness, formication, and paralytic stiffness of the limb, increasing during rest and when beginning to move, relieved only for a short time by motion. Frequent paroxysms of cramps in the calves; worse in the open air, better from dry heat.

Stillingia.—Left-sided syphilitic sciatica, especially with periostitis and nodes of the tibia. The pains are of an aching character, in the feet, on the instep, in the hips, in the legs, in the left lumbar region; in the toes and external malleoli; as well as in the back, shooting down the thighs and legs.

Sulphur.—Sub-acute sciatic and crural neuralgia due to some constitutional dyscrasia. Pain in the small of the back, stitching drawing on rising from a seat; tensive pain in the hip joint, especially the left; drawing, extending down the limb, accompanied by a bruised sensation. There is a heavy feeling of the affected limb and numbness as if paralyzed, particularly when walking, or more or less rigidity of the knees. The pain is worse at night and from the warmth of the bed. In chronic cases there is swelling of the feet.

Tellurium.—Left-sided sciatica, with sensibility of spine; the pains radiating from the sacrum to the right sciatic nerve, increased after walking, in bed, when pressing at stool, on coughing or laughing and when lying on the affected side.

Veratrum.—Extreme violent pain with nervous irritability. Electric jerks in the limbs and pains resembling a bruise, especially at night and towards 3 P. M.; must sit up, and let the legs hang out of bed; must walk about.—*Pract. Medical.*

DR. E. FORNIAS.

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POINTS IN THE GENERAL MANAGEMENT OF EAR DISEASES.

BY

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(Read before the Homœopathic Medical Society of the State of Pennsylvania.)

IN preparing this article it is not my purpose (nor would it be within the limit set for these papers) to consider the subject of the general treatment of ear diseases in detail.

I desire rather to interest, if possible, the general practitioner in a brief discussion of a few practical matters which frequently confront him in the treatment of these affections; and in doing this I trust I may be pardoned for introducing to this section matter which to many of you will appear elementary.

I have occasionally heard physicians complain that the so-called specialist is encroaching upon their province, and yet when one comes to look at the matter fairly, so far as the class of diseases is concerned which we are now considering, one finds that comparatively few of at least the acute inflammations of the ear are seen by the aurist, and most cases that come under his care, whether acute or chronic, have first been in the hands of the family doctor.

If, then, the ear specialist is found to be a busy man, is it not possibly because of the lack of proper interest in, or study of this department by the general practitioner?

My experience leads me to believe that the general profession as a whole does not appreciate as it should the importance

of the subject, and therefore much of this work, from want of the consideration which it deserves will drift to the hands of the specialist.

I suppose it is probable that the necessity for making use of certain apparatus deters most physicians from giving the attention they otherwise might to ear disease, and yet this ought not be so, for the instruments required are not complicated nor does their management always call for extensive experience.

There is no part of the body where ocular demonstration is so necessary both for diagnosis and treatment as it is in the ear; no place where symptoms alone are more misleading. For example, *pain* in the side of the head or ear may mean inflammation in either the aural canal or the drum cavity, or in fact, anything from simple neuralgia to a meningitis.

So also of *discharge* from the canal, it tells nothing as to the source of the inflammation, which may be anything from a furuncle to a brain abscess.

Even an expert can with no degree of certainty determine the character of any but surface lesions by the symptoms alone; why, then, should the general practitioner to whom these cases are bound to come handicap himself in their diagnosis and treatment by a lack of familiarity with the use of the head mirror and speculum?

A little time given by the physician to practice with these simple instruments of precision would enable him to score many a success where otherwise awkward failure is assured.

In the treatment of inflammatory ear diseases, and as a preliminary to operative procedure, the matter of cleanliness is one of prime importance and deserves at least a moment's consideration.

In a large proportion of ear affections it is one that will count for much toward a favorable outcome and will often decidedly shorten the period of treatment; and no operation, however trivial in character, should be done without such previous preparation of the parts.

The cleansing of the ear, particularly those parts lying at the bottom of the auditory canal, can, surgically speaking, never be entirely satisfactory, as the scrubbing, shaving, etc., which are done on other free surfaces, preparatory to operations, are not practicable here.

Probably as efficient a method as any (coarse deposits and

discharges having been removed with syringe, forceps or probe under illumination with the head mirror) is first to rub gently the walls of the canal with a cotton wound probe soaked in hydrogen dioxide, followed by filling the canal with a solution of carbolic acid crystals (white) in glycerine in the proportion of 50 grains to the ounce and allowing this to remain for fifteen to thirty minutes; a watery solution of mercuric bichloride 1-5000 or stronger may be used in the same way.

It goes without saying that only the most carefully disinfected instruments are to be used in the treatment of the ear. Neglect of this matter has too often led to unhappy results; and there really can be no excuse for such neglect, as examinations and local treatment are almost invariably carried out under artificial illumination, and what could be simpler *in case of doubt* than the passing of the instrument to be used through the flame?

One of the most frequently required therapeutic manipulations is that of *syringing the aural canal*, for the removal of cerumen, foreign bodies or the products of inflammation.

To protest against the syringing of the ear where there may be nothing to be removed would seem superfluous if not ridiculous, and yet I know that it is not uncommon practice for physicians to direct patients complaining of deafness, itching, etc., to syringe or have the ear syringed, and that without even an attempt to inform themselves as to the actual condition of the parts.

Such practice is not only senseless, but may be distinctly harmful to the hearing apparatus. This little operation is not the perfectly innocent procedure that some seem to think it is, and should, as any other therapeutic measure, be applied only under definite and positive indications and the ocular evidence of the presence of a foreign substance in the canal or drum.

A common fault in syringes of every form lies in the large size of the nozzle lumen; the stream for syringing to be efficient should not come from a larger opening than $1\frac{1}{2}$ to 2 millimeters. A small sized stream will insinuate itself between the canal wall and foreign body, where a large one may push the substance further in.

In order to secure an efficient return flow of the water in syringing, it is most important that the stream be directed with carefully graduated pressure, against and along the *upper back wall* of the meatus, the canal at the same time being

straightened as well as possible by gently pulling the pinna with the fingers of the left hand upward and backward. Care should be exercised that the vessel for catching the return fluid, and usually held by the patient against the side of the head, be not pushed upward so as to close the meatus.

As to the fluid to be used in syringing, I believe the most satisfactory for the ordinary case is a blood warm solution of soda bi-carb. or sodium chloride, a teaspoonful to the pint. The only occasion in which an antiseptic is required is where there is a purulent offensive discharge; in which case the free instillation of H_2O_2 followed by syringing with potassium permanganate 1 to 5000 will be found most serviceable.

The removal of impacted cerumen is much facilitated by the instillation of hydrogen dioxide a few minutes before syringing.

The first desideratum in an ear syringe is cleanliness. If a piston syringe is used it is preferably made of glass with a packing to the piston of a material that may be boiled without injuring it (asbestos or rubber). The ordinary leather plunger is not clean and cannot be made so.

An objection to the piston syringe is that if the nozzle is olive shaped (as it commonly is) it cannot be introduced well into the canal as occasionally may be required, and if the nozzle is pointed and hard (metal or hard rubber) it may do damage to the meatal walls.

I have known a number of instances where from the unexpected slipping of the finger on the barrel, the nozzle point has been driven through the drum head. A piston syringe when not in use should be kept filled with carbolized water or other antiseptic.

Personally I prefer in ordinary cases, the soft rubber ball syringe with flexible nozzle which is sold in the shops in 2 sizes. It's soft slim nozzle can be introduced well into the canal and hardly do harm to the canal or drum even in unskilled hands, and can without damage to it be made perfectly clean by boiling, as often as may be found necessary, which should be after each time it is used in cases of suppuration.

It must not be forgotten that vertigo, vomiting, and even prolonged syncope may follow the use of fluid too hot or cold or injected with too great and sudden pressure. Such symptoms are most apt to occur if the patient is allowed to stand during the treatment.

A rule rarely to be departed from is that the syringe is not to be used to remove blood clots from the canal after an accident for fear of washing septic material through a ruptured M. T. into the drum cavity or deeper.

The *Politzer bag* is generally looked upon as an instrument belonging exclusively to the ear specialist; I believe, however, that it is an apparatus which should be in the hands of every general practitioner.

Many cases of impaired hearing may be entirely relieved in the early stages by a few inflations of the drum.

For example, following acute and subacute catarrh of the naso-pharynx, a swelling of the Eustachian tube may so shut off the air from the drum as to much impair the hearing and cause considerable pain. Often a single inflation with the politzer bag will relieve the pain and at once improve the hearing.

After acute or subacute otitis media without perforation, the hearing is at times much lowered owing to the presence of the free exudate within the drum, and is not restored until absorption takes place. The ventilation of the tympanum and stirring up of the exudate by the politzer manœuvre greatly hastens the absorptive process and rapidly improves the hearing.

Again we know that the treatment of acute perforative otitis media is never complete without the inflation of the ear after the closure of the perforation; indeed, for the lack of this, many a case of chronic deafness results, and as most of these cases are treated by the family doctor and not the specialist, it is important that the general physician should be familiar with the use of the politzer apparatus.

The politzer inflation will also be found a great aid in emptying the tympanum of pus during the treatment of chronic suppurative otitis media, but should never be applied where the tympanic perforation is small, for fear of driving the discharge backward and infecting the mastoid cells.

In the treatment of inflammatory and suppurative processes within the ear, the too common practice of filling the canal with *medicated fluids* or *powder* without either examining or cleansing the parts should be mentioned only to be condemned as not only quite useless, but fraught with danger even to the life of the patient.

When it is desired to bring the deeper surfaces of the ear

under the action of medicinal agents, it is most necessary that the parts be first well cleansed and usually dried, and this in the case of the ear, cannot be done properly without the aid of the ear speculum and under illumination with the head mirror.

To satisfactorily instill fluids, the pinna should be held up and back to straighten the canal, otherwise a bubble of air at the bottom may prevent contact.

To make sure that the remedy reaches the deepest portion of the tympanum, get the patient (affected ear uppermost) to do the Valsalvian manœuvre and swallow immediately after, or, while swallowing to press the tragus downward several times into the meatus like a force pump.

In the use of medicated powders, the same careful preparatory cleansing and drying is necessary. The blowing or pouring in of large quantities of such powder is to be avoided because of the risk of blocking up the canal and retention of the discharge.

In tympanic suppuration, unless the perforation is large, but little powder can be made to reach the diseased surface, and nothing more is accomplished than to antisepticise the canal, and if more than a light coating is given the M. T., a small perforation may be blocked and drainage interfered with.

Heat and *cold* are most serviceable agents in the treatment of acute ear diseases. The moist or dry heat will be found useful in the management of inflammations within the auditory canal or drum cavity, acute furunculosis, or acute otitis media. It is rare that cold applications are pleasant or of benefit in these conditions, while, preferably in the form of the ice bag, they will in mastoiditis and mastoid periostitis exert a remarkable influence not only in controlling the pain, but often in aborting an attack.

Either heat or cold to be most effective should be continuous in its applications. Intermittent action, especially in the use of the ice-bag when the ice is allowed to melt without prompt renewal, only tends as a rule to aggravate the suffering. The parts must be kept continuously cold. We must not forget, however, that the ice-bag in its soothing effect on the pain of a mastoiditis may act as a two-edged sword, and while it is comforting the patient, it may, by masking the symptoms, be favoring the further accumulation and advance of purulent

exudate to the cells of the mastoid or elsewhere. In recent years I have come to the conclusion that when after twenty-four to thirty-six hours of the ice-bag the patient is not comfortable *without it*, its continuance will be unsafe, and the mastoid should be opened.

Cold even over an inflamed mastoid is sometimes not only ineffective, but actually unbearable. This is particularly so in old asthenic individuals or anæmics.

Of the operations which the general physician may be called upon, and should be prepared to do, there is none more important than that for the drainage of the middle ear through the drum head. The acute otitis media which so frequently demands this procedure is usually treated by the general physician and not the specialist. If the operation were more frequently done by the former, the latter would not be so often called upon to care for the complications.

The so-called paracentesis of the membrana tympani is called for mainly when tympanic accumulations of exudate, either catarrhal or purulent, cannot be removed in any other way. Even where perforation has already occurred spontaneously, but is insufficient, or unfavorably located for drainage, the operation may be just as strongly indicated.

The indications for the operation in acute cases will be found, briefly, in persistent pain, prostration, elevation of temperature, and bulging of the membrana tympani. All these symptoms are, however, not necessary; in fact, persistent uncontrollable pain alone is quite sufficient justification for proceeding to the operation.

There is no question but that early paracentesis will, when properly done, usually promptly relieve suffering and will often obviate unpleasant or even dangerous complications. Many a beginning mastoiditis has in this way been checked.

As to the operation itself, I believe the points to be emphasized are: (1) Careful antiseptic preparation of the canal and instruments; (2) the making of an incision in the M. T. which will drain the drum well and not close rapidly; (3) avoidance of meddlesome interference after drainage is established.

I need not repeat what has been said of the antiseptic preparation of the canal, although if, as I believe is good practice, the carbolyzed glycerine has been instilled into the canal from the beginning of an attack of earache, no further preparation need be made, except the important one of boiling, or in some way sterilizing the knife immediately before use.

A word here may not be amiss regarding the use of *anæsthetics* for this and minor operations. The integument of the canal and the drum membrane are so sensitive and supplied with so little loose connective tissue that when inflamed it becomes exquisitely sensitive to even the touch, and the pain of the incision is almost unbearable.

The patient will be spared much suffering and danger, and the physician much after worry, by doing these little operations thoroughly and with precision, and yet there are few patients and no children who can be depended upon to preserve the necessary quiet, without an anæsthetic. In most cases sensitiveness can be sufficiently dulled by a local anæsthetic, but where this fails or with highly nervous people or young children a general narcosis may be required; and when we have to resort to it I believe it is more satisfactory to induce a complete relaxation rather than be hurried in the manipulations on account of insufficient anæsthesia.

To return to the question of paracentesis, when general anæsthesia is not used the operation may be made painless by placing against the membrane a small pledget of cotton wet with pure cocaine, carbolic acid and menthol *equal parts of the crystals*. To secure its full anæsthetic effect this should lie for ten to fifteen minutes directly in contact with the membrana tympani.

I find the most effective knife is one made like a small pointed tenotome. The blade should be as thin as possible consistent with the necessary strength, and have a keen point and edge; whether the shank be straight or set at an angle is of no consequence.

With the patient in the recumbent posture as he will be under an anæsthetic, the relative position of the parts at the lower end of the canal (M.T.) is so disturbed to one who is not accustomed to frequent examinations with the speculum, as to make it important in such an operation as a paracentesis, to elevate the patient's head for the moment required by the operation in order to properly locate the incisions.

The most efficient incision, and it should be a cut and not a puncture, is one reaching from the upper posterior edge of the membrane down to the lower rim and thence running several millimeters forward, forming thus a flap of the posterior lower segment.

It is imperative that it be made quickly and with precision, the eye following each movement of the knife.

Damage to the intra-tympanic structures is hardly possible in making the cut, and if in inflammatory cases, the opposite bony wall of the tympanum is felt with the point of the knife so much the better a depletion of the tympanic mucous membrane being desirable.

If the case be one of suspected suppuration of the drum, with congestion and sagging of the upper posterior canal wall, the upper end of the cut should be carried upward beyond the tympanic ring into the integument of the canal. In order to avoid conveying infection to a clean tympanum, it is a matter of much importance that the point of the knife be not allowed to touch the canal walls on its way to the membrane.

Immediately following the incision and evacuation of the exudate, an instillation of carbolized glycerine or insufflation of boric acid powder should be made, and the meatus filled lightly with aseptic gauze to be changed as soon as dampened by discharge.

As a general rule, I believe it is best for a number of hours at least to avoid syringing, or other manipulations for the purpose of removing discharge. Overzealousness in this direction will sometimes convert a simple catarrh, which would otherwise heal with but little further attention, into a purulent otitis with possible complications. After six to twelve hours' rest, the cleansing of the canal by syringe or otherwise will depend upon the character and amount of the discharge.

SEPTIC ENDOCARDITIS. Rachford, of Cincinnati, reports a case of septic endocarditis occurring in a child four years old which proved fatal after a course of about seven weeks. The chief interest in the case rests in the fact that the endocardial infection which resulted in the death of the child followed upon a severe tonsillitis and that the child had had a previous endocarditis which developed during a preceding attack of scarlet fever. Rachford recalls two other cases of rapidly fatal endocarditis occurring in children which were in all essentials similar to this one. Both had a previous endocarditis as a result of ulcerative tonsillitis without the occurrence of arthritis and recovered from these attacks apparently perfectly with the exception of the damage done to the mitral valve. Several months later they were again taken ill with ulcerative tonsillitis and this was followed by the fatal endocarditis to which they ultimately succumbed.—*Archives of Pediatrics*, Oct., 1906.

MATERIA MEDICA STUDY.

BY

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(Read before the Homœopathic Medical Society of the State of Pennsylvania.)

"Every person," says Gibbon, "has two educations, one which he receives from others, and one more important, which he gives himself." It is far from the purpose of this paper to encroach upon the sacred realm of our instructors. May they be given more and more ability to not only satisfy the exactions made of them by others, but also to come nearer satisfying themselves! Studying, on the other hand, is emphatically what one does for himself, and this is our theme.

The object of studying is the acquisition of knowledge—the comprehending, the remembering, the recollecting at the proper time. Memory is the fundamental basis of all knowledge, and the cultivation of the memory is the labor of the student. The labor of cultivation of the memory consists pre-eminently in the *exercising* of the memory, and in so doing it is necessary to observe certain fundamental principles that are absolutely essential. These principles are:

1. To grasp the thought fully, clearly, definitely;
2. To connect it with other things that are known, so that you may have something to recall it by;
3. To frequently revert to it, until you are sure that it has become a permanent possession, and one which you can recall by any one of numerous connecting links.

In other words, comprehend fully first of all, then compare, and lastly repeat unsparingly, and thus satisfy the object of studying.

To comprehend a thought fully, we must analyze and classify it, and this process, with reference to the Cough of Aconite, was revelled in in a recent paper read before the Philadelphia County Society. We there suggested that the analyzing could very pleasantly and profitably be still further elaborated by comparing the many and various works and compends on Materia Medica, thus learning clearly and definitely the opinions and explanations of the various authors respecting the Cough of Aconite. We would add that this work of comprehending could be carried still further by reproofing, applying the most modern instruments and methods of the present day laboratory, and using any additional means of elucidation; but

a study of any subject in *Materia Medica*, as of any other subject, is never finished until the three fundamental principles of study we have enumerated are fully satisfied.

The present paper means to take up the remaining two principles in the acquisition of knowledge, viz., comparing the Aconite Cough symptoms, and repeating frequently. These papers shall have served a collateral purpose eminently if they expose the folly of taking up any *Materia Medica*, reading the symptoms and committing them to memory, and at the same time entertaining the delusion that you are learning the remedy or *Materia Medica*; furthermore that any living being can ever learn all of the *Materia Medica*, or even all about Aconite, any more than he can learn the dictionary or encyclopædia. One of the best accessories to a *Materia Medica* student's sanctum might be a poll parrot that would continue saying incessantly—"Analyze, Classify, Compare, Repeat."

In the previous paper referred to was outlined what appears to us to be a satisfactory method of investigating and learning the Homœopathic *Materia Medica* without offending the present day student's scientific trend of thought, and yet without vandalizing our Homœopathic *Materia Medica*; if possible to create a fascination for this kind of work; to disabuse a surprisingly prevalent opinion that there is a lack of uniformity in our *Materia Medica*; and, finally, to impress the fact that homœopathy will respond to scientific tests when intelligently applied.

The method consists in analyzing, for illustration in this instance, the cough symptoms of Aconite. Every cough symptom of Aconite found in any *Materia Medica* is analyzed and classified into—

1. Character of cough;
2. Exciting cause, and its location;
3. Conditions accompanying and following the cough;
4. Conditions of aggravation and amelioration.

The "*Materia Medica Pura*" contains all the symptoms observed and collected by Hahnemann and his disciples; Allen's "*Encyclopedia of Pure Materia Medica*" contains a record of all the positive effects of drugs upon the healthy human organism up to the year 1877; "*A Cyclopædia of Drug Pathogenesis*" is a compilation of the physiological effects of drugs upon the healthy human organism and the results of experiments on the lower animals, supplementing Allen's *Encyclopædia*; Hering's

"Guiding Symptoms" contains principally cured symptoms, and as Hering remarks, "is a complement to all other *Materia Medica*;" if to these we shall now add, soon as they be recorded, the symptoms that the Institute of Drug Proving of the American Institute shall evolve in their wonderful work now in progress, we shall have a very complete enumeration of all the symptoms thus far observed as at all connected with Aconite. But the work need not end here, and every authority in existence can be similarly treated, and the result will be only more convincing.

In each of these investigations the author's symptoms are each and all analyzed separately in this fascinating manner, the results compared, and finally the deductions we must make will be surprisingly the same in all cases, by whomever made. Any tyro can do all this and never fear contradiction. In other words, the result must be a scientifically accurate compilation of the cough symptoms that can be produced and cured by Aconite. Furthermore, it need not be a great surprise to find that the great Hahnemann, in his *Materia Medica Pura* anticipated the greatest part of all we now know.

The next step recommended in a complete study will also be mechanical, and if gone through with several times will unfailingly convince that the many *Materia Medica*s are not so much at variance with each other, but each gives expression to what its author considers more important,—the many *Materia Medica*s therefore are only so many opinions, none of which can contradict the scientifically accurate facts evolved by our first operation. Time forbids the elaboration of this step in this paper.

The last step to complete this very interesting and comprehensive way of studying our Homœopathic *Materia Medica* consists in the comparing of the Aconite Cough, for instance, with other coughs, and repeating without stint. This process shall be the burden of this paper.

The conclusions arrived at by any one, and every one pursuing this method of study must be, that—

1. The character of the cough that Aconite is most apt to cure is—

Dry, short, severe, hoarse, loud or croupy;

2. The exciting cause, and its location is most apt to be—

Larynx—Burning or tickling;

Trachea—Burning;

Throat—Scratching;

3. The conditions accompanying and following the cough are most apt to be—

Larynx—Pain;

Chest—Stitches or soreness;

Expectoration—Bloody occasionally;

4. Aggravations, ameliorations and direct results of the cough are most apt to be—

<At night;

<Lying on either side;

<From change of temperature;

<From eating or drinking;

>Lying on back.

This is the analytical and scientific conclusion of an investigation into the Aconite Cough, and is, we admit, as dry and unmemorizable as are repertories. Again, it is studying the Aconite Cough as an abstract quantity which is impossible in homœopathy just as it is unhomœopathic to prescribe for individual symptoms, when we find them in patients, without studying the patient's individuality. Consequently, in making comparisons or, better, differentiations, while we deal with the abstract to begin with, we must embellish our abstract by the so-called genius or individuality of the remedies to be differentiated.

With reference to Aconite, we must bear in mind that it is a short-acting remedy and therefore is not called for by chronic coughs. We must remember that such coughs come on suddenly and in plethoric individuals—weakly individuals come down more slowly and recover more slowly than the Aconite patient. The symptoms of Aconite, partly because of their severity, are very generally accompanied by a nervousness amounting to fear, even of death, and a great restlessness. The pains, whether in throat, larynx or chest, are severe—great soreness, even burning and stitches. Then we must also bear in mind the numbness and tingling pains peculiar to Aconite. And not forget the fever and great thirst. Indeed this only faintly describes the individuality of Aconite, and the more thoroughly we know the entire action of Aconite the less likely we shall be to make errors in differentiating it from all other remedies.

There is no reason why we should not be able to differentiate the Aconite Cough from every other cough in our *Materia Medica*. Such a task must be undertaken if we would make

a complete study of the Aconite Cough. We are, however, studying the Aconite Cough merely in order to illustrate a method of studying our *Materia Medica*, and precisely as it is advisable, on account of the encyclopædic nature of the subject, to study the polychrests first until familiar with them, then the semi-polychrests, then a less frequently used division, etc., so following the lead of the great Bœnninghausen, the greatest of classifiers, it is advisable to limit our work by using only the highest grade of remedies—the capitalized—in some good repertory. We have selected Dr. Kent's late and excellent repertory to illustrate our claims. Thus, for comparison with Aconite for dry cough, we have Alum., Ars., Bry., Hyos., Ign., Lach., Nux-v., Petr., Phos., Rumx., and Spong.

Alumina has a dry cough. Extreme dryness and lack of secretion characterizes the action of this remedy throughout, but the cough is a chronic one.

Arsenicum symptoms, in the abstract, remind one in many respects strongly of Acon. It has very great restlessness and anxiety, even fear of death; the intense thirst, burning and heat, aggravation at night, etc., also a dry cough. But unlike the Acon., restlessness that comes in the early stages of an acute inflammatory fever, the Ars. restlessness comes in the later stages after the patient has become greatly reduced, or in low typhoidal fevers; the anxiety and fear of death is rather because the patient feels it is useless to take medicine; the thirst is unquenchable, wants only a little water at a time, and that often not retained; the aggravation comes after midnight, while Acon. has its aggravation in the evening and early night; etc., etc. The two remedies need never be confused. The dry cough of Ars. is apt to be an extension of the catarrhal state from the nose downward into an asthmatic dyspnoea, with a dry hacking, altogether different from the Acon. dry cough.

Bryonia also has many symptoms in common with Acon., and it is just this very great resemblance of symptoms in the abstract that disheartens the student, but the differences are distinct, and when the individuality of the remedy in the concrete is once recognized the distinctions become quite clear. We must bear in mind that stitching, tearing pains, and that an aggravation of all symptoms by motion, are characteristic expressions of Bry., and that its cough hurts the head and chest, so that the patient will hold the chest every time he coughs—this cough comes on quickly after "taking a cold," but not so abruptly early as is the case in the Acon. Cough.

Hyoscyamus has a dry, nervous, spasmodic cough, worse when lying down, and better sitting up, while the *Acon.* Cough is better lying on back, but worse lying on either side. The *Hyos.* cough is worse eating, drinking, talking or singing, and the *Acon.* Cough is also worse eating and drinking. It is peculiarly effective in old people, in nervous temperaments, and when caused by an elongated uvula.

Ignatia: dry, short, nervous cough; but *Ign.* has running through its symptomatology a peculiar contradiction of symptoms, that is noticeable also in its cough; the more the patient coughs the more he wants to cough, instead of getting relief.

Lachesis has a dry cough, worse after sleep, which is the chief characteristic of this remedy, and it is peculiarly aggravated by touching or pressing the throat.

Nux Vomica is useful in dry, short, hacking cough with headache, and soreness in the region of the stomach, and unlike *Acon.* is apt to be worse after midnight or very early in the morning. The comparison of this remedy with *Acon.*, and indeed the comparison of any two other remedies could occupy the whole period allowed for the reading of a paper, and it should always be interesting. Furthermore, it should also be more instructive and interesting than the study of either remedy without comparisons, because two of the fundamental principles of study would thereby be satisfied. On the other hand, it could be less instructive, because the first principle of study, viz., comprehension, be ignored almost entirely or quite so. Query: How many students, particularly beginners, can learn the *Materia Medica* by applying themselves to such otherwise valuable works of reference as even Gross's *Comparative Materia Medica*? This being our theme, we may be pardoned for again reverting to it: Comprehend, Compare, Repeat! Comprehension can never be complete on account of the voluminosity of the material; comparisons may become odious; repetition may be tiresome prattle. Our object being to learn the *Materia Medica*, we can fortunately come more or less near comprehending the apparent individuality of the remedies; comparing their most glaring resemblances and differences; and repeating within reason, brought about by using only one symptom of one and the same remedy as the guide for one study. In our illustration, all comparisons are made with the Cough of *Aconite*. The peculiarities of the *nux* temperament, fiery, excitable, thin, irritable, choleric persons with dark hair,

persons who lead a sedentary life or make great mental exertion, gormandizers, even debauchers—conditions that are apt to exist when nux symptoms are indicated—must be distinguished from the plethoric Acon. temperament with rigid fibre, even though possessing also dark hair and leading a sedentary life. Nux is more apt to relieve symptoms that follow stomach abuses; Acon., complaints caused by exposure, and especially when bearing any of its leading features such as anxiety and nervous restlessness.

Petroleum also has a dry cough most prominently, according to Kent. Like in Acon., it is apt to be worse at night, and particularly effective in children. Acon., however, is particularly suitable also to old persons. There is considerable resemblance of these two remedies in the respiratory symptoms when their pathogenesies are examined, but the genius of Acon. is very apt to be noticeably absent or present. It has been observed that the Petr. cough may be accompanied by a melancholy mood, feeling as though there were but little time left to make a will—the fear of death of Acon. is more apt to be with anxiety and restlessness. It may be well to remember the adaptability of Petr. to persons with light hair and skin, Acon. to dark hair and skin; Pet.'s special preference for the skin in its field of action, with aggravation in the winter time, and its adaptability to long-lasting diseases might also be of help in differentiating this remedy, of which Allen says "the action is very complex and not easily defined."

Phosphorus: cough is dry at first, though with expectoration later. It rarely has a fever, and therefore is not so apt to be indicated in acute diseases. It arises from an irritation or tickling down in the trachea. The cough is worse from a change to cold air, from lying on the left side particularly, also worse lying on back; and Acon. is worse lying on either side, but better lying on back. The individuality of Phos. also impresses itself upon its cough, so that in phthisis, the patients are by preference tall and thin. There is great oppression on chest, and there is often a tendency to easy hemorrhage from the lungs, etc., etc.

Rumex has a dry cough, fatiguing and incessant, caused by tickling in the supra-sternal fossa, extending down the larynx and trachea—all very much like in Acon., but with Acon. there is more fever, etc., indicating inflammation, while in Rumx. there is simply an excessive morbid irritability, yet not passing

into inflammation. The Rumx. cough is particularly aggravated by cold air, so that the patient will cover up the head in bed in order to stop coughing. The Acon. Cough is apt to be caused by exposure to a cold dry wind, but is not so apt to come on until the patient is warm in bed and has had several hours of sleep, and its cough is not particularly relieved by covering the head, as is the case with Rumx.

Spongia is almost synonymous with croup, but our knowledge of this remedy should not stop there. It is just here that another great advantage of this method of studying our *Materia Medica* suggests itself, viz., that it gives a blow to the prevalent empirical way of prescribing our homœopathic remedies, and the less we yield to empirical methods, the less we will have of combinaton tablets, and the seductive recommendations that emanate from the laboratories of the many manufacturing pharmacies, and the better versed we shall become in the true art of healing. Spong. is also indicated for a dry cough that is not croupy, though not often thought of, and Dr. Kent claims it to be thus most prominently indicated. Extreme dryness of the mucous membranes has been called a keynote of Spong. The dry cough of this remedy is often indicative of heart disease, pnthisis, whooping cough, etc. Like Acon. it has the anxiety, fear, fear of death, etc., but with much less febrile excitement. The symptom develops slowly, in Acon. abruptly, at least more quickly. The Spong. cough is worse in hot room, but better by eating or drinking, again distinguishing it from Acon., whose cough is worse in the open air, and cold air, and worse after eating or drinking. Spong. is adapted to children and women particularly, Acon. to children and old age.

So much for the remedies having the very dry cough preeminently. The list represents only a fraction of the formidable array of all the remedies having this very common symptom. And all the others can be differentiated from Acon. just as easily, and the study made exhaustive, but for the patience of those who must listen. It has been sufficient, however, to demonstrate even now that this is a superior method of studying and learning our *Materia Medica*. As we proceed with the study we are learning much more than the mere Cough of Acon. The individuality of the many remedies obtrude themselves in the scheme, and by the time we have exhausted this symptom entirely, and several more similarly, we know to re-

member, and are able to apply our knowledge to the treatment of the sick.

The remedies that Dr. Kent capitalizes for short cough are: Acon., Coff., Sep., and Stann.

Coffea has a short, nervous cough. This remedy resembles Acon. very much in many other respects, and its differentiation may be difficult. It has extreme sensitiveness, intolerance of pain, great nervousness and anxiety, like Acon., but with gaiety rather than depression, pleasant dreams rather than the anxious dreams, and the fear of death is wanting. Its wakefulness, on account of mental activity, is apt to obtrude itself, and together with the extreme acuteness of all the senses, generally differentiation ensues.

Sepia: short, dry cough, as if proceeding from the stomach, perhaps with pain in stomach, or it may be nausea or faintness and bitter vomiting. The "goneness" in the stomach is a common symptom of Sep., especially in women's diseases, the special field for its clinical use, quite different from Acon.

Stannum: Although this remedy is most popular for a profuse mucous or muco-purulent expectoration with sweetish taste, it seems also specially indicated for a short, dry, shattering cough, which, like in Acon., comes on in evening till midnight. It may have, like Acon. and Bry., sharp, cutting stitches in chest, but just as Sep. has "goneness" at stomach, so Stann. is very apt to present its leading characteristic symptom, viz., a great weakness of chest.

Now the hoarse coughs must be differentiated, and our repertory capitalizes Acon., All. c., Bell., Hep., and Stann.

Allium Ceba: The hoarse cough of this remedy is like the hoarse Cough of Acon., but the preceding and accompanying coryza—acid from nose and bland from eyes—will generally help to differentiate it. In Acon. the child, without any premonition probably, wakes before midnight with a hoarse, barking cough and clutches the larynx; but in All. c. the cough is more apt to be a gradual extension of the coryza into the larynx, and the child clutches the throat because of severe pain, as though the cough might tear it.

Belladonna is a great remedy for hoarseness generally, always with a soreness and burning dryness in the larynx; and so it is a remedy for hoarse cough, especially when provoked by the burning dryness that is a characteristic indication for the remedy, running like a red thread all through it. Like in

Acon., only more so, the symptoms come on very abruptly, but they also terminate so. The peculiar heat, redness, throbbing and burning will help to differentiate it easily from Acon. There is more redness of skin, mouth and throat, and more general throbbing and burning than with Acon. The head suffers more in Bell., the chest and heart in Acon. Bell. fears imaginary things with delirium, Acon. fears death without much delirium. Bell. has no thirst with fever, Acon. has much, etc. These remedies are easily differentiated generally.

Hepar Sulphur: The dry hoarse cough of this remedy is differentiated from the similar Acon. Cough, as is the case in differentiating generally, by the distinction of their individuality mainly. Instead of the nervous fear of death of Acon., Hep. is characterized by an oversensitiveness of mind and body—sensitive, even sore, to the slightest touch, “takes cold” easily from the slightest exposure or draught, even the uncovering of hand or foot; sensitive to noises and odors, and mentally very irritable for the slightest reason.

Stannum has the hoarse cough prominently, as well as the dry cough for which it has already been considered. We must bear in mind the characteristic weakness and emptiness of the chest.

The character of the Acon. Cough is also apt to be croupy, and Kent considers this a symptom of prime importance with Acon., Hep., Iod., Lach., Phos., Samb., Spong., and Stram. But Kent's opinion in this matter need not be accepted, any authority may be adopted for study. We have preferred Kent's Repertory because we think it a good one, because of its recent compilation, and because we like its arrangement very much. As said before though, the author has nothing to do with the scientific fact. Furthermore all our authors seem to differ—a fact, perhaps the greatest, that has been prejudicial to the claims of homœopathy to the rights of a science. But on studying the *Materia Medica* in this way, we learn also why and wherein they differ, and realize why the desire to reprove overtakes us, as though to settle once for all the apparent discrepancies. Too much reproving can probably never be done, but to make valuable additions to our *Materia Medica*, the fine distinctions should be more accurately defined, so that all authors thereafter *must* understand that by croupy cough, for instance, we do not mean a hoarse, or barking, or loud, or explosive, etc., cough. That a hoarse cough does not imply

necessarily that it is dry, etc., etc. In other words, the work of reproof must not only consist in the application of the modern instruments of precision, and laboratory investigations, but we believe we are justified in the claim that almost the greatest work of all yet to be done, in our work of revision, must consist in defining the hair-splitting differences between the meaning of symptoms, precisely as any other definition in science must be scientifically accurate, and preclude any possible ambiguity or obscurity. Recall your first pages of arithmetic, geometry, chemistry, geology or botany. Even so-called synonyms are not absolutely identical, and the important work here referred to implies the enlistment of an army of students of Coleridge, Horne Tooke, Shakespeare, Trench, etc., but once accomplished our *Materia Medica* authors will no longer appear to disagree so decidedly. Their disagreements then will consist only in their interpretation of the facts and their causes. Let us do more work with the material already so voluminously accumulated, at the same time that we keep busy in reproof!

The *Acon.* croupy Cough is a dry, hoarse, barking cough that comes on suddenly, after exposure to dry, cold winds, generally early in the night; more apt to come in plethoric and strong children; should have the characteristic restlessness and anxiety—may have even fear of death—and the old saw bears repetition, that the more distinctly the individuality or genius of *Acon.* appears in the case the more likely the prompt cure of it. It should never be prescribed merely because it does happen to be the best first remedy in 90% of all cases of croup.

Hepar Sulphur: The croupy cough of this remedy is very much like that of *Acon.*, and is apt to be caused by exposure to cold dry winds like *Acon.*, but it should have some looseness about it that does not belong to *Acon.*, and it is apt to come on in the morning, while with *Acon.* it is apt to appear before midnight, therefore is often indicated after *Acon.* We must remember the oversensitiveness of *Hep.*, its irritability, and aggravation from slightest exposure, even uncovering of hand or foot—while with *Acon.* we are apt to have anxiety, fear, and high dry fever.

Iodine has a hard croupy cough with difficult inspiration. Borrowing from mathematics, $Iod=Acon.$ —extreme restlessness and anxiety; consequently follows after *Acon.* has removed the anxiety and extreme restlessness. Both these

remedies are most suitable in persons with dark hair and eyes, but the Acon. patient is also apt to be plethoric. It may not be amiss to remember the great emaciation, so characteristic of Iod., and the ravenous hunger peculiar to it.

Lachesis: Dr. Hering's discovery, also has a croupy cough prominently, and according to some authors most prominently. The cardinal indications for this remedy generally are:—

1. Extreme sensitiveness of the larynx to external touch, and especially a feeling of suffocation and constriction so as not to bear anything tight around the throat;
2. The pain of the larynx is left-sided, extending into the ear;
3. Worse after sleep;
4. Better as expectoration loosens.

These peculiarities easily differentiate Lach. from Acon., which has none of them, per contra its own well defined.

Phosphorus: Dr. Kent in his Repertory names Phos. as another remedy having a croupy cough most prominently, and I can no longer refrain from some remarks I was tempted to make while considering All. c., which is ranked as a remedy of the very highest importance for dry cough by Bœnninghausen, and not named at all among the 250 remedies of Kent or Lee and Clark. So, very likely, Dr. Kent is recording his opinion based upon experience, and the clinical verifications of others with reference to Phos., but he fails to give it the same prominence in his recent *Materia Medica* that he does in his repertory, and this is another one of the many apparent discrepancies that tend to estrange the student from the truths of our *Materia Medica*. This is the subject, however, of the next of this series of papers, and I only wish to emphasize the fact here again that the many *Materia Medicas* and repertories are after all, only so many distinct opinions—many opinions that may be correct, too, I wish to draw your attention to—but in this world of “many men of many minds,” unless we have record of the authority of such opinions, the natural result with all but the over-credulous will be skepticism. In studying Phos. and its croupy cough, we must say that, as any other remedy in the *Materia Medica* might be indicated if the totality of symptoms warranted, unless the totality of symptoms be happily covered by Phos., it seems more generally indicated for the later stages of croup, when collapse threatens, rattling breathing, weak thready pulse. Phos. and Acon. are generally eas-

ily differentiated. The most essential features of Phos. and the rationals of the pathogenic action distinguish it. It has, as a special feature characterizing it, an adaptability to tall, slender people with fair skin, blonde or red hair; Acon. dark hair and eyes. Phos. is particularly indicated in young people who grow too rapidly, are inclined to stoop, and suffer from chlorosis and anæmia; Acon. in children who develop very high fevers easily, and possess a "tonicity of fibre," and in the old. Phos. has a weakness of the whole body, Acon. has great congestion with full bounding pulse and high fever. Phos. suits the phthisical, Acon. the plethoric and strong, but leading a sedentary life. Phos. low adynamic fevers with little or no thirst, Acon. synochal and inflammatory fevers with much thirst. Phos. the brain fag, Acon, the acute fear even of death. Phos. disorganizes and decomposes the organic substances of the body, while the power of Acon. is wholly functional. Phos. acts upon the blood, bones, liver and kidneys pre-eminently, Acon. upon the cerebro-spinal nervous system. The enumeration of differences and on the other hand the enumeration of the many resemblances could be carried much further to "confusion * * confounded."

Sambucus: The study of each remedy, in this way, should teach a lesson, and being the education that a student gives to himself, most valuable. We fail to find a single cough symptom of any kind noted under Samb. in "*Materia Medica Pura*," "*Allen's Encyclopædia*" or "*Cyclopædia of Drug Pathogenesis*." *Hering's "Guiding Symptoms*," however, notes a single croupy cough symptom, and that he ranks as of the third degree of importance; therefore a clinical symptom more or less frequently confirmed, but not verified by cures. In *Knerr's Repertory of the "Guiding Symptoms"* for a reason that we admit we can not conceive, it is raised to the second rank, and now *Kent* ranks it in first place. Not to encroach further on the matter of our next paper, where is the thinking student who will not do very serious thinking of his own by this time! This kind of thinking, however, leads direct to orthodoxy and not to skepticism. We must not pass this remedy by, moreover, without learning something of it also. It is indicated in asthma millari and conditions simulating croup. The spasms of dyspnoea come on suddenly, generally at midnight; child turns blue, gasps for breath, and seems as if almost dying. Goes to sleep, and wakes up with

another attack repeatedly. Acon. has its croupy condition also in the early night, you will remember, but does not, like Samb., repeatedly sleep, and sleep into a repetition of the attack. The fever of Acon. is apt to be characteristic; the fever of Samb. is apt to be dry, while he sleeps, but the patient is apt to sweat profusely when awake, and this latter symptom accompanies many Samb. affections.

Spongia: Now we are face to face with the most popular known remedy for croup. We shall indulge in only a comparatively brief differentiation. Like Acon. and Hep., the Spong. croupy cough is apt to be caused by dry cold winds, but does not have the high fever and dry hot skin of Aconite. The Acon. condition is apt to come abruptly. Spong. requires a day or two longer for its development. They both have anxiety, fear, even fear of death, and great restlessness, but the febrile excitement distinguishes them. The attacks are both apt to come on before midnight, but in Spong. more gradually, and probably with greater difficulty in breathing, on account of the dryness of mucous membrane, which is a keynote of Spong. The inspiratory effort of Spong. is particularly worse. Spong. is apt to suit fair complexions and lax fibre, Acon. dark hair and rigid fibre. Spong. has exhaustion for the slightest reason that is absent, if not reversed, in Acon. Both are worse from warm room; but Acon. is aggravated, while Spong. is ameliorated by eating and drinking.

Stramonium is the last remedy having a capitalized importance with reference to the character of the Acon. Cough. This remedy, we believe, has not been sufficiently thought of in croupy coughs that are violently spasmodic, as many are. Stram. is characterized by the violence of its symptoms throughout, mental and physical, as also by their convulsant and spasmodic nature. This applies to the cough as well, and we believe would relieve some severe attacks, where Acon. does not do so promptly, and before Spong. applies, when the attacks are decidedly convulsant, and perhaps where every cough is accompanied by a jerking up of the legs. Its wonderful immediately palliative effect in asthma, when its burning leaves are inhaled, suggests this probability also. Like Acon. it applies most particularly to young, plethoric persons, but there is the absence of the fear of death, and there is apt to be more delirium and loquacity.

Time makes it necessary that this end the illustration of our views with reference to the study of our *Materia Medica*. We have compared about 25 remedies with *Acon.* thus far, some several times. The "character" of the *Acon.* Cough has been studied consistently to its entirety. Our next step would be to compare similarly the "exciting cause and location" of the *Acon.* Cough; then the "conditions accompanying and following" the *Acon.* Cough; and lastly the "aggravations and ameliorations." This would entail the similar comparison of as many more remedies and numerous repetitions. This is not a mere repertory study, nor a cyclopædic undertaking and can be pursued by any novice. By the time of its entire completion, we claim that it will have given a more general and better knowledge of our Homœopathic *Materia Medica* than hitherto suggested. It will satisfy the scientific stickler—God grant him long life—it will encourage the student that becomes bewildered at the outset, and it will create a love and zeal that seems to be a present day lamentable desideratum.

BY WAY OF RECAPITULATION.

For the purpose of aiding students, we have attempted to outline a method of studying our *Materia Medica* that seems to us to be more satisfactory in producing the desired result than any method that has been drawn to our attention in the past twenty years of active study of our Homœopathic *Materia Medica*. What is the "desired result?" The desired result from our point of view is to be able to cure the sick by the application of a knowledge of the means to be employed. The acquisition of this knowledge is the purpose of study. This knowledge implies the comprehending, remembering, and the recollecting at the proper time. The basis of the method is the symptom, the factor that made our law of *similia* possible. Consequently the comprehension of the symptom is paramount, and it is here our foundation for study must be laid.

Now the selection of any symptom of any remedy is the first step to be decided upon, and the only difference between all symptoms is that some are harder to analyze than others.

By way of illustration we selected a common symptom of a remedy at random, and therefore a hard one, for special symptoms are more rare and therefore generally much easier to analyze and compare.

This symptom is thoroughly analyzed. Then the corresponding symptom of all the provings of this remedy ever made is noted, analyzed and classified according to the best known scientific methods.

From this result it is easy to deduce, with scientific accuracy, what should be expected in future provings, and what in the application of this remedy to the sick.

Knowledge becomes a science only when it is "co-ordinated, arranged and systematized." The "co-ordinating, arranging and systematizing" of our symptoms, therefore, as we recommended in our first paper, makes or unmakes homœopathy's claims to a science. The study of this science is only complete after "comprehending, comparing and repeating" it. The "comparing and repeating" are consistently demonstrated in this paper. The "comprehending" is the fascinatingly interesting work of a future paper. Thus, only, can the three essential elements of study be satisfied. And best of all, we are demonstrating the whole to be practical.

This method, to our knowledge, has not been exploited in full thus far. We do not claim this to be the "onliest" method of learning. Far from it! But we do claim that where the comparing and repeating—the second and third fundamental principles of study—have been apparently omitted, they often have been freely employed unwittingly; furthermore, additional effort has likely been expended in satisfying the first and most important principle—the comprehending. This may have been done by reproving, best of all proving on self, laboratory work with the remedies, a consideration of the various theories of the many authors with reference to the general analysis, physiological and so-called pharmacodynamical action and analysis, a consideration of pathological possibilities, a devotion to clinical verifications, etc., etc. All these we claim are methods of aiding comprehension, and very desirable of cultivation,—and in a few persons with marvelous or trained memories sometimes sufficient. Then, again, no other system of studying our *Materia Medica*, to our knowledge, tends at the same time to establish firmly and soundly in the students' minds, the crying rights of homœopathy's claim to be ranked among the sciences.

Nor do we claim that this is all of the *Materia Medica* that need be learned. Far from this also! On the contrary, the symptom fiend deserves our pity for the necessary narrowness

of his vision, and our warning lest he occupy the cell next to the chess fiend. But we do hold that the symptom ignorer is also to be pitied for his bigotry, and certainly he has no claim to homœopathic fellowship. Our theme treats only of the symptomatology of our *Materia Medica*. Is it necessary to mention the orthography—the spelling and pronunciation of our remedies? The study of the sources, and their natural classification, as well as the many various groupings, their so-called physiological dosage, their various alkaloidal and other extracts and their dosage, their pharmaceutic treatment, their history and their provers—all and more are important *Materia Medica* matters to round out *Materia Medica* knowledge. Without symptomatology, however, there could be no homœopathy.

Symptoms have been fully analyzed in works on diagnosis and pathology, and particularly in Hering's unfinished Analytical *Materia Medica*. And we have our valuable Comparative *Materia Medicas*; and are not unmindful of the fact, indeed it has been singularly suggestive, that the most attractive parts of the various *Materia Medicas* have been the analytical and comparative features, sometimes the real cause of their popularity; and finally the part that has been of the very greatest help has been the reiteration of the salient points.

Up to this time, our time has been consumed in studying and analyzing remedies, not symptoms, and in comparing remedies and not symptoms, save in a desultory way. On account of the complicated complex character of the remedies, this has been an herculean labor and accounts for the present dearth of what the generation preceding us would have been willing to concede as able prescribers. If time permitted it would be pleasant to give reasons why our predecessors were probably better prescribers. But let us be plain as possible, and honest as possible with ourselves. One *remedy*, *Acon.*, for example, can be studied ever so faithfully and long and repeatedly, and yet each time one returns to its consideration, after having studied a meagre score of remedies similarly, and the remedy seems aggravatingly new, unless we have frequently reviewed in the interim. Now study several hundred, take a vacation to Europe, and return to the study. Ladies and gentlemen, I believe I am voicing common experience and not making an exhibition of the weakness of my own memory.

Once again, take one hundred similar objects, no two alike,

and compare them carefully, walk away, and repeat your recollection of their differences, and I ask you do you think you would have remembered more fully the various distinguishing peculiarities if you had compared these objects all with only one in particular? The comparison of all similar coughs with only the Acon. Cough in particular is the strength of our claim.

So, our demonstration is not a study of Aconite, nor a study of the Acon. Cough in particular or of cough in general, neither a comparison of coughs merely, nor a differentiation of the Acon. Cough from all other similar coughs,—it is simply a method of studying the *Materia Medica*. We sincerely believe this a method par excellence of learning the so-called individuality and peculiar features of the remedies of our *Materia Medica*—the highest aim to which we have dared to aspire. These once known, the other kind of knowledge, to know where to find the rest by reference is assured and easy.

THE RELATION OF THE SPECIALIST TO THE GENERAL PRACTITIONER.

BY

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I BELIEVE there is need of a more cordial and thorough understanding between the specialist and the general practitioner, to the end that there be less misapprehension of fact and fewer cases of misunderstanding than at present, and that those we have in our care may have the benefit of more frequent consultation and advice, and that we ourselves, on both sides of the question, may benefit by the enlargement of our medical knowledge and more exact information regarding the conditions for which we are called upon to prescribe.

This may not appeal to one who has had no dissatisfaction or fault to find with his consultation, or with the specialist who has not encountered some of the instances I may relate.

It is rather to those who have felt in certain instances that medical conferences or the reference of cases had been unavailing and regrettable that I address myself.

If you still feel there is not sufficient excuse even yet for bringing up the subject, pause and consider how many criticisms you have heard of the way in which both you, your

medical friends and your patients have been treated at the hands of some one or other in whom you reposed your confidence or to whom you have intrusted your case.

It is, of course, natural that we view each problem from our own standpoint, but what often does us more good is to catch the rays from the other fellow's situation, and so we are here to talk impersonally about some of the things that concern our patients, ourselves and the profession to which we belong, in such a way and with such frankness that some of the complications, at least of the past, may be avoided in the future.

If everybody had their full share of common sense, courtesy, tact and good breeding, there would be less necessity for presenting such a paper, but where these are sometimes present in limited degrees only, or where selfishness, either intentional or otherwise, enters into our professional intercourse, it seems necessary that we be reminded that the ethics of the medical profession are or should be of a higher standard of the world in general.

One of the first things a specialist should remember is, that the case referred to him remains the property of the physician who has directed him; he is in his hands for a special and particular purpose, not to be appropriated for other and subsequent treatment; not to be referred to some other specialist, without permission, and not to be delivered to some other medical associate either directly or indirectly. The violation of this rule, so obviously fair, has been the cause of more bitterness and recrimination than almost any other, and sometimes a consultant has been led into it unwittingly and unsuspectingly by the patient himself, whose confidence in his home doctor may have been none too great and who may bring argument and excuse to bear as to why they prefer the consultant to go on with other and subsequent treatment.

As careful as he should be in this respect, he has one obligation a thousand more sacred, and that is to listen to no tale of criticism or of censure that this patient may relate or by word or look or insinuation admit for an instant that such a statement may have the slightest foundation in fact. These scandal mongers go from your office to discuss you, to the next open ear, and to such we should be deaf as well as dumb.

The specialist, too, should recollect that the practitioner in a measure stakes his wisdom and reputation in calling in his services or in referring to him his case. He fails too often to

remember that he may have lauded his achievements and guaranteed his thoroughness to the patient who comes with reluctance, and any failure on his part through lack of interest or attention reflects discredit on the judgment of his physician. The specialist has therefore to remember that he has at stake not only his own reputation, but that of the colleague who has sought his aid. If coupled with an unsatisfactory or even satisfactory interview, he fails to furnish promptly the desired information relative to the case, the general dissatisfaction is complete and he who referred the case is justly out of patience with a consultant who lacks both tact and reasonable courtesy. Few things are more annoying than a delayed and belated report, in which the patient is as much interested as his physician. We are all undoubtedly more or less influenced by the money element of a case, and the specialist may err in failing consciously or unconsciously to show as much courtesy and consideration to a poor case as to one where there is to be no abatement in the fee. He must remember that this patient has feelings and sensibilities quite as keen, if not keener, than has his well-to-do case, and that such a patient may be a faithful adherent of the doctor who has intrusted him to his care. When a consultant gets too big or too busy to take the bad with the good in your practice he very largely has lost his sphere of usefulness to the average practitioner, and this brings me to the subject of fees.

The general impression seems at times to prevail that the specialist is a man who sits in his office, tossing off opinions and gathering in his princely emoluments at ten dollars a look, and I presume that one of the first questions put to a practitioner when he has urged a consultation or advised a *special* examination is in reference to the probable fee, for, through his intimate acquaintance with the patient's finances or resources, he becomes the best medium for advising as to the fee. I cannot lay sufficient emphasis upon the delicacy and judgment with which he should decide this matter, being fair and impartial as is possible to both sides. Guarding his patient from a charge, which correct, ordinarily, might be excessive in a particular one, he should not fall into the error of pleading the cause of rich and poor alike. Indeed, it has at times appeared that some men have a mania for saving every patient, rich and poor alike, every dollar they possibly can, with the idea apparently that in some way it will militate

against them for their case to pay a perfectly fair and reasonable charge. Surely, if a surgeon be willing to trust the physician's judgment and accept his suggestions in the poorer cases, it must follow, as a matter of honor, that the physician protect his interests from those who are rich but stingy, and he should insure in such cases as large a fee as is proper and consistent under the circumstances.

The specialist may sometimes unwittingly offend both physician and patient because from lack of knowledge of the patient's finances he charges what might be excessive in that case but he cannot be expected to judge from appearances alone, nor can he be expected to voluntarily reduce his fixed charges unless requested to do so, in fact offense has been given in this direction, for many people resent keenly being taken for objects of charity. Therefore the right way, it seems to me, is to accord the practitioner some discretion and latitude in the way of suggestion, and get as full a record of the case as possible beforehand, not only as to the fee, but to previous treatment, peculiarities of temperament, etc. When such privileges and discretion are abused they should be promptly suspended.

Many men dislike to ask this favor and prefer to send such people to a free dispensary, or not to send them at all. The first with the result that they teach them the way to free medical service, to which they rapidly introduce their friends, and before long they are going not alone for the original ailment, but they have adopted the dispensary as their medical consultant. The latter course deprives the patient of the benefit of the service they could readily have obtained.

The clientate of some men do not contain many families who can pay the necessarily increased charges of a man who limits his work to one or two lines, and it is practically impossible where several in one family require attention for them to undertake the expense unless conditions are made possible.

Another thing that must be guarded against is the sense of obligation which some men seem to feel toward those who send them cases. We receive a large portion of our income, it is true, through the support of the profession at large; but the surgeon should feel no sense of obligation to his friend who refers him work, nor will a considerate, honorable man seek to place him in such an attitude. It is presumed that he has earned through his ability and skill the confidence of the man

who intrusts his case with him. And it is presumed also that through his time and attention he earns his fee, and, consequently, there is no obligation on either side. I mention this because there seems to be a prevalent idea that the reference of cases is a very one-sided arrangement, and that the specialist is in no condition to reciprocate.

The specialist who is honest in his calling and faithful to your interests has few opportunities to refer cases. Certainly he cannot refer your cases to somebody else and neither can he refer somebody else's case to you. He may feel that they need expert advice in some other line, but it is not his province to refer them without your permission.

This feeling of obligation has in some instances brought the matter down to a commission basis. Such situations are fortunately rare and yet there are many refracting opticians claiming to have hosts of men who regularly send them cases; and the inference is strong that it is not for love.

Again, the writer has had hints and intimations more than once of the propriety of a division of fee, or a suggestion to add on a five or a ten, because, forsooth, they had been unable in the past to collect their own bills.

The specialist can only earn one fair fee. If he divides this, he is robbing himself. If he overcharges, he is robbing the patient.

The compensation to the practitioner can only be the satisfaction he gets in feeling he has done his duty to his patient, and that he has perhaps learned something of value for a subsequent case.

The considerate consultant will not attempt to occupy the centre of the stage, in a consultation to discount what has been done, or by look or inference to cast discredit upon the physician in charge, or to lessen the family's confidence in him, and any feeling that may exist that the specialist is critical in his attitude toward the attainments of the practitioner should, as a rule, be dismissed as a misapprehension. The fact is that specialists are in the main continually surprised at the wide range of knowledge generally shown, especially when we recollect that the college curriculum has in the past given much less attention to special work than it does at present. We do, of course, on the other hand, see instances of mistaken diagnosis and treatment, and listen to apologies for them. No man need feel ashamed to confess mistakes in judgment in

lines of work outside the field of his training. The only occasion for self-condemnation is where he continues the management of a case knowing full well that he is uncertain as to his qualifications, and where his opportunities for observation have been limited.

Again, we hear at times that the specialist is superficial in his observations and is not well grounded in general medicine. There is no doubt more or less truth in this assertion; but where, will the general practitioner tell me, is the specialist to get information other than in a theoretical way? He cannot treat for general conditions the cases that are referred to him for special examination, and when he does both general and special work he loses the support of the man in general medicine.

The ideal way, of course, would be for the specialist to have had, say, ten years of general experience, but with the increased requirements for entrance to our colleges with an extended course of four years, eighteen months in a hospital and a year abroad the practitioner would find himself 35 to 40 at the beginning of a specialty and without wide reputation or skill.

One charge at least cannot be brought against the specialist that the general practitioner is often guilty of, and that is practicing in unfamiliar lines.

I believe, too often, fearing to offend, we do not frankly enough point out the errors in diagnosis and the mistakes in treatment that we all see. It flavors too much of business to do these things, except in instances where we have a close and sincere friendship.

Again does the specialist see through colored glasses. How often do we hear, "Oh, he'll find something wrong. Don't go to an oculist. He'll put glasses on you." About as sensible to say, "Don't go to a dentist; he'll fill your teeth." Or, "Don't go to a shoemaker; he will sell you shoes."

The more a man understands his work, the more expert he becomes in detecting conditions that are hidden from the untrained eye and ear.

The heart specialist is accused of hearing mythic heart murmurs; but his is a trained sense, just as the eye of the pathologist sees the mote in the microscopic field that means nothing to the uninitiated. This faculty for observation should be coupled with that splendid intuitive judgment which marks

the conservative and discriminating surgeon, whose advice not to operate is often as valuable as his decision to proceed.

Still it must be borne in mind that most of the cases we see are people with ailments. If we prescribe glasses too frequently we are cheered by the thought that there are thousands who go about with unrecognized errors of refraction who could and should be helped.

Are the specialist's fees too high? Well, that depends undoubtedly on the work he does. He is better paid per visit than the average general practitioner; but considering the time spent in special preparation and the limited lines of work he assumes, I should say not.

Human life is lightly valued in dollars and cents, and the medical profession is largely to blame for it.

There was at one time an unreasonable prejudice against the specialists and occasionally we still find the staid old family doctor who fears the loss of his prestige and his families' confidence to call in assistance. Fortunately, this is fast dying out, and the man who safeguards his patient's interest and who himself takes the initiative in such a suggestion is the successful physician, and his patients are not slow to recognize this interest in their highest welfare.

Again, the man who declines to assume a responsibility for conditions he does not and cannot be expected to thoroughly understand is only just to himself.

We have too many specialists of a mushroom growth. Men who spend six months in a dispensary clinic or take a short post-graduate course, and then launch out as authorities. They have done much to bring into disrepute the entire class. Homœopathy needs to-day as much as anything else thoroughly trained experts, as good and efficient as any in the dominant school. Our patients have a right to be served with the best, and the more generally the specialist is recognized and supported the more experienced and able will he become, and in turn the general practitioner and homœopathy held in higher esteem.

It is not, of course, to be presumed, nor does anybody expect, that the general practitioner is to sit in his office as a distributing agent for the convenience and comfort of the specialist. But there is a class of practitioners to whom "all are grist that come to their mill," and who treat *at*, any and every ailment, and who tenaciously hang on to every patient save their

own families and their poor relations down to the twenty-three cousins. These they generously turn over to the specialist with vague intimations of a mysterious patient they have referred who may in the future consult you, but who seldom materializes.

He is usually one and the same gentleman who calls upon your services, for a patient whom he knows full well will never remunerate you. He is often the professional pirate and case stealer, who drags the ethics of his profession through the mire and reduces professional honor and fraternalism to the competitive standards of commercialism. He does not harm the specialist, nor can he do serious damage to the profession he disgraces, but like the jackal and the hyena, he brings up the rear, stooping to anything and feeding upon anything he can steal.

It is not so much his scepticism of the value of specialism as the potent influence of the dollar, the half dollar and the quarter of a dollar that causes him to withhold from his patients the benefits of expert council and advice.

The ideal physician is rare; he is the alert, progressive student, honorable alike to his patients and his professional friends, quick to note his own limitations, and too square to trade upon the credulity of his clientele.

A man whose mind is too broad and generous and truth-seeking to admit of the contemptible jealousies and squabbles that are a menace and a disgrace to our profession.

The ideal consultant in any line is also rare. He has to combine those qualities of skill, judgment, tact, general adaptability and common sense which are rarely met with in one man. He should be selected not on the grounds of friendship or reciprocity, not on account of club membership nor from a standpoint of political expediency, but on the single standard of recognized skill and ability, and peculiar fitness for the particular case in mind.

And the attitude of the specialist toward the practitioner should be one of helpful consideration—a desire to conserve and further both his interests and those of the patient; to assist him to a wider and broader understanding of special diagnosis and to gain from him in return knowledge along general lines, and a wider insight into the realms of general medicine.

THE MANAGEMENT OF THE THIRD STAGE OF LABOR.

BY

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(Read before the Homœopathic Medical Society of the State of Pennsylvania.)

IN presenting a subject with which every physician has had so much practical experience, it is my purpose to call attention to the importance of dealing with the stage of the after-birth with as much due regard to the normal mechanism and the natural laws operative, as is given in the stage of foetal expulsion, and thus make a plea for the expectant management, in contra-distinction to the active, manipulative handling that to-day is too extensively in practice. There is a tendency on the part of too many physicians to grasp at means that will shorten the number of hours their cases are in labor, presumably to conserve the strength of the patients, actually to allow them to finish with the tedious job and return to numerous other professional obligations. The expulsive stage suffers far too severely by unjustifiable interference; to a much less degree, however, than the succeeding stage, when you consider the almost total disregard accorded its management. When the child is born, there remains for the attendant merely the "simple" act of "getting rid" of placenta and membranes, and this is effected in the quickest, most convenient and therefore, naturally, the most careless manner. From my own experience, I feel that too great a stress cannot be placed upon the proper *scientific* management of the third stage. It is an absolute certainty that the proper management of this stage is, for the Puerperium, just as important, if not more important, than that of the birth itself.

For a thorough understanding of the mechanism of this period of labor, it is essential to become somewhat elementary, and review briefly the formation, structure and mode of attachment of the normal placenta. As the fundamental principle, then, we begin with the all important transformation of the endometrium into the Dicipua of Pregnancy. There is the presence of an irritant derived from the ovaries, and, probably through the circulatory system, conveyed to the uterine mucosa, to induce a hyperæmia and consequently increasing the normal thickness of this mucous membrane of 1-3 mm. to 1 c.m., in many cases. Of greatest importance is the differ-

entiation which accompanies this enlargement of the mucosa into two histologically distinct strata: a lower strata, joining the musculature, to which the glands are limited, the glands hypertrophied and separated by but delicate strands of connective tissue (portions of the normal interglandular substance), and hence the name given to it, "Spongiosa"; and an upper or outer strata composed entirely of the large decidua cells, termed the "Compacta," through which may be seen here and there a narrow crypt leading to the glands beneath it. Within this latter layer will also be found capillaries of the normal endometrium, markedly dilated.

The already fertilized ovum enters the uterine cavity and by virtue of the eroding function of its trophoblastic covering imbeds itself directly into the decidua awaiting it, so that it comes to lie beneath the epithelial covering of the decidua. As a rule, this is at a point above the middle line of the uterine cavity; it may be in the fundus or, as is more frequently the case, on the walls, anterior or posterior. The point of nidation becomes the site of placental attachment—for with the imbedding of the ovum the villi of the chorion are formed and we have their growth towards and directly into the capillaries, again by the eroding action of the trophoblastic elements covering them. Numerous capillaries will eventually anastomose—forming the large uterine sinuses. To hasten through this interesting part of placental formation, we need but mention the chorion læve and chorion frondosum as the next steps, and notice the marked proliferation of the primary villi giving rise to the countless secondary branches.

At the end of the third month, we find the placenta properly formed and able to carry on its functions, histologically composed of the villi filling up the uterine sinuses, and thus floating loosely in the maternal blood stream, the bulk of placental tissue being limited on the foetal surface by the chorion, and on the maternal by the decidua. At this period, the villi are not firmly united to the decidua or sinuses. We have all seen cases of abortion at the third to fourth month, where the villi have been simply pulled out of the decidua sinuses, intact. After the fourth month begins intimate union, however, by means of infarcts which bind the villi to the decidua, and indeed to the compact layer of the decidua. At term, naturally, this attachment is the firmest, and at this time it is utterly impossible to pull the villi out of the sinuses or even to loosen the

placenta from the decidua compacta. How then does separation take place? Ordinarily the separation of the placenta begins during the birth of the child. As soon as the greatest part of the child leaves the uterine cavity—thus, comes to lie in the lower portion of the parturient canal—contraction of the upper uterine segment takes place. There is a marked diminution in the size of this segment. However, the placenta can follow such a decrease only to a limited degree. Therefore, the weakest part of the attachment gives way, and hence there occurs a tearing of the delicate interglandular strands of tissue of the decidua Spongiosa, the compact layer of the serotina being thrown off as a portion of the placenta. Thus you can readily appreciate of what importance it is in this normal placental loosening, to have a perfectly formed decidua, and, as will be referred to later, the results of malformation in this structure.

Another point is of value to keep in mind—the placenta does not in its entirety separate at one and the same moment. The process is a comparatively slow one. When the after-birth is unable to follow the diminution in the size of the uterine body, it begins to pucker or becomes folded, and when the child is completely expelled, with the decrease in the intrauterine pressure attendant upon this act, some part near the centre of the placental bulk as a rule, gives way or loosens, and into this so formed “free space” the maternal sinuses will bleed, producing the “retro-placental hematoma.” From this point, separation continues gradually, associated with enlargement of this blood clot, until the entire mass is free of uterine attachment, when it is inverted, as a rule, and falls into the lower birth canal, producing separation of the membranes by virtue of the traction by its weight—the foetal surface thus most frequently presenting. This method of Schultze is not invariable, a certain proportion of cases being met with where the placenta presents with its free edge or maternal surface, the retro-placental clot being absent.

At this point begins the management and the question at once arises, How long ought we to await the expulsion of the placenta? According to the teachings of the best clinicians here and abroad, we answer:

1. Until we are sure that the placenta is separated.
2. Until we give the patient an opportunity to expel the placenta by the natural forces.

There are several means at our disposal to determine the separation.

a. With the birth of the fœtus, and BEFORE the separation of the placenta, the fundus uteri will be three to four fingers' breadth below the umbilicus.

With the separation and the formation of the retro-placental blood clot, associated with more or less muscular relaxation, the fundus rises to the umbilicus and above this point, the distance varying in cases.

b. Associated with the elevation of the fundus there is an elongation of that portion of the umbilical cord protruding from the vulva. For demonstration purposes, a sterilized safety pin placed through the cord immediately in contact with the vulva and as soon as delivery of the child has taken place, will be found 3-6 c. m. removed from the vulva, when the placenta has separated and fallen into the lower uterine segment.

c. The absence of a certain fluctuation or pulsation wave in the cord, elicited by holding the cord in one hand, and with the other lightly massage or press upon the fundus uteri. This sign obtains only so long as the placenta remains attached to the uterus, for then, in as much as the umbilical vein remains filled with blood, the external manipulations will be transmitted through the cord. When separation is complete, transmission is impossible. This sign has been but recently brought out by Strassman, of Berlin, and I have been able to verify it. It fails only when, exceptionally, valves are present in the umbilical vein.

With separation accomplished, what length of time are we justified as designating sufficient to await spontaneous expulsion? I will not be dogmatic as to minutes or hours. The safest rule is to wait until the patient has recuperated sufficiently from the second stage of labor to be able to assist the usually insufficient uterine contractions in expelling the after-birth. In a normal, uncomplicated case, until we have absolutely proven that the woman cannot empty the uterus of placenta and secundines, all interference on the part of the accoucher is unjustifiable. On the other hand, it is folly, when the placenta is completely separated, and involuntary and voluntary efforts are insufficient, not to interfere. The majority of authorities are agreed that a half hour is an average period to await spontaneous expulsion. F. Ahlfeld, in his text book of Obstetrics, published in 1898, adhered tenaciously to non-

interference in the third stage, advising waiting hours or even days if need be, for the placenta to be expelled spontaneously. Since this publication, it is interesting to note the results of his investigations of this subject published in the *Zeitschrift für Geburts und Gynäk Bd LVII, Hft. 1*. His statistics at this time showed that in 406 consecutive births in the Marburger Klinik, in 6, 5 per cent. of the cases, the abdominal forces were unable to expel the placenta, and these were obtained by Credé Method, $1\frac{1}{2}$ to 2 hours post-partum; in 3,75%, there was spontaneous expulsion; in 19, 25 per cent., the abdominal forces and external pressure were sufficient to bring about expulsion. Statistics of most clinics agree with these figures, proving spontaneous expulsion as occurring in the minority of cases, and that the voluntary efforts of the woman prevail in the majority of cases. Likewise, the statistics of Schauta show that in 100 cases, after the first half hour post-partum, the placenta was found in the lower birth canal 99 times. Thus we see, we have in the majority of cases of labor to deal with a simple *retention* of the placenta, a condition that is too frequently confounded with adherent placenta. Uterine contractions in these cases are present, as easily demonstrated, but the contractile activity of the upper segment is not of such a degree as to be able to empty the passive lower segment of its contents. Cases where we have an enormous retro-placental hematoma will have the cavum uteri so overstretched as to incite pains of sufficient intensity to deliver the placenta. "The contractions of the abdominal walls, aided, when these are relaxed by the pressure of the hand on the fundus of the uterus, will bring about the expulsion." By the latter means, we are not making use of the Credé expression.

Premature attempts to incite uterine contractions are to be heartily condemned. These consist in grasping the fundus—massaging, administration of ergot—as soon as the child is born, in order to hasten the third stage. It is these interferences too early made use of that bring about complications in the Puerperium. Such manipulations are the sources of the so-called "hour glass contraction" of the uterus, in many of the instances. If they are successful in expelling the contents of the uterus, time has not been given for the proper development of thrombi in the sinuses, and then comes post-partum hemorrhage to menace the life of the woman or to actually result in death. Late formation of thrombi leaves easy channels for infection and all its concomitants. These manipula-

tions predispose, after the uterus is empty, to a tetanic condition of this organ, similar to the condition seen where ergot is administered at the completion of the third stage as a routine and without indication. This tetany predisposes to the lack of thrombus formation, and although severe hemorrhage does not occur, nevertheless the sinuses are not completely closed and the lochia will remain sanguinous, possibly profuse, during the greater part, if not the entire puerperal period. To avoid artificial separation and expulsion of the placenta and attending dangers be patient, and give the woman in labor and nature a chance. Wait until you know positively the after-birth is free and the woman cannot expel it. Better lose valuable time than to fly to the Credé method, or worst of all, to attempt manual separation. Failure of both voluntary and involuntary efforts then justifies the Credé expression. If this method fails to bring about delivery, the indication is for complete narcosis and a second attempt by Credé method. Failure under this condition indicates that the placenta must be extracted manually—the extreme resort.

The question of the loss of blood to the woman, while adhering to the expective management, merits attention. Excluding hemorrhage sufficiently severe to warrant the immediate emptying of the uterus, we have that condition frequently present, where, the placenta being situated laterally, the lower rim is but loosely attached and this attachment, giving away under the weight of the retro-placental bleeding, allows the blood to flow continuously until the placenta is delivered. The bleeding is naturally more severe than in cases where we have to deal with a retro-placental blood clot. The absence of the hematoma favors increased bleeding and less excitability to uterine contractions. Ahlfeld has tabulated the result of his investigations on this point. Out of three thousand births, normal and abnormal, the statistics were as follows:

Length of 3rd stage.	Number of births.	Amt. of blood lost.
0- 5 minutes	49	441 Gr.
6- 14 "	40	637 "
15- 29 "	158	759 "
30- 44 "	186	836 "
45- 60 "	215	775 "
61- 90 "	1674	402 "
92-120 "	712	327 "
and over		

In other words, the shorter the third stage, the more blood lost; the longer, the marked comparative decrease in amount lost. The bleeding of the average case, therefore, is not an indication for shortening this stage. Of course, there are many conditions, which, when present, will demand the almost immediate emptying of the uterus of placenta and membranes by any means. A notable instance being an active tubercular lesion of the mother. I am referring to the normal uncomplicated case. The above table is interesting in showing that in the vast majority of cases the length of the third stage was one to one and one-half hours.

G. F. Blacker, in the *Lancet*, April 14, 1906, states that the tendency to shorten the third stage to much shorter than thirty minutes is attended with considerable risk to the mother. He likewise says there is no harm in waiting a half to two hours for spontaneous expulsion and thus avoid manual interference.

While I believe most thoroughly in the expective method, I can readily appreciate that it may be carried too far. Strassman reports a case where the placenta was awaited twenty-four hours. Manual separation was then performed and the woman died of an Embolus. Too long waiting allows increase in the number of thrombi, narrowing of the canal, time for beginning putrefaction, all making operative interference more hazardous and difficult. Watch the case, recognize the signs and indications present, and you will then know when not to interfere or when interference is called for.

Before going further, I wish to but mention the following elementary but vitally important points:

1. Never make traction on the cord to hasten separation.
2. Do not twist the membranes to facilitate their separation. We believe the best plan to insure their complete removal is to support the bulk of the placenta as it is delivered and then by backward pressure on the fundus, reduce the anti-flexion that tends to occur, and so make the uterine cavity as straight as possible. If the membranes fail to separate, gentle massage will facilitate their loosening and expulsion. Traction on them should never be practiced.
3. Always make a thorough examination of the placenta and membranes to ascertain whether complete or not. Especially careful should the maternal surface be examined. This surface should always be perfectly smooth, and with the removal of the blood clots, present a dull grayish appearance.

the membrane covering this surface being the compacta of the decidua Serotina.

Deviations from the physiologic process of this stage of labor do occur, and the comparative frequency of certain forms demands consideration. Perhaps the most serious is that constituting the "Placenta Accreta," although in its true form, met with infrequently, and, according to Schauta's experience, decidedly less often since the Credé expression immediately upon the completion of the second stage was discontinued by him. Its etiology and pathology must be excluded from this paper, except to mention its occurrence in cases of myoma of the uterus. I recall a case in the Maternity Department of Hahnemann Hospital last spring, where the placenta failed to separate totally, demanding manual separation, during which an intra-mural fibroid size of an orange was diagnosed. Immediately over this tumor the placenta remained firmly adherent. A large proportion of the cases of the adherence reported have been associated with uterine fibroids.

In diagnosing this pathologic state, we differentiate (a) Total adherence (true accreta). (b) Partial adherence. In the total or true adherence we have:

1. Absolutely no hemorrhage from the placental site.
2. No alteration, as a rule, in the height of the fundus uteri; at least not of sufficient degree to be confused with the elevation associated with placental separation.
3. No elongation of cord, protruding from vulva.
4. No degenerative changes; hence no offensiveness, despite the fact that the placenta may remain in the uterus for days. Membranes may separate, however, and give rise to an offensive lochia.
5. Strassman's fluctuation sign in cord, present.

The therapy consists in artificial separation and removal. In some cases, Credé expression may avail and it should always be given a most thorough trial before abandoned. As a rule, intra-uterine manipulations are demanded. The strictest asepsis and antisepsis must be observed in this operation. It is well to cut away that part of the cord protruding for fear of its being carried upward into the parturient canal, and infect the case. The fingers should separate the placenta by being passed between the membranes and placenta on the one hand, and the uterine wall on the other, breaking through, then, the spongy layer of the decidua Serotina, allowing the compact

layer to come away with the placenta. This insures a smooth surface when the placenta is removed. The operation may be difficult on account of an absent or poorly developed spongiosa, the condition that causes the adherence; and in some instances, the dull curet must be substituted for the fingers. Where the spongiosa is entirely lacking, removal of the placenta can be completed only by bringing away portions of the uterine musculature, a dangerous process, threatening uterine rupture, and demanding cessation in some cases, from further attempts at removal. This possibility should be born in mind. Severe hemorrhage may demand cessation of operative interference in the difficult cases, demanding tight tamponing of the cavity with iodoform gauze, and succeeding attempts at complete removal of placental tissue in various sittings, if the condition of the patient permits. It is in this class of cases that death from post-partum hemorrhage is held unavoidable. In the lighter form of true adherence, manual separation succeeds readily and hemorrhage can be avoided.

In "partial adherence" we have to deal with hemorrhage. Massage and Credé expression may expel the major portion of the placenta; a portion remains attached to the uterus, however, and in preventing it from becoming firmly contracted, causes bleeding. This condition demands prompt treatment. Time should always be taken for disinfection of the hand introduced into the uterine cavity. The adherent tissue should be digitally separated. This accomplished, the uterus contracts and hemorrhage is controlled. Here, too, the curet may be used where the fingers are unsuccessful.

Incompleteness of operative interference for any of the forms of adherence means trouble. If bits of placenta tissue are overlooked, later, we have to deal with subinvolution endometritis, the placental polyp and possibly malignancy. It cannot be too forcibly urged, always explore the cavum uteri digitally and see that the entire surface is smooth, before declaring the operation at an end. Also, after the uterine cavity has been entered with the hand, or instrument, always give an intra-uterine irrigation.

Again, the membranes may be retained completely or partially, a condition at once diagnosed upon inspection of the expelled mass. In the former case, gentle persistent massage of the uterus may be all sufficient to obtain the Secundines. Frequently, a portion will be found protruding from the os,

which can be grasped by the fingers or forceps and gentle traction made, aided by the massage. These methods failing, the indication is present to enter the uterus and remove them. Strassman recommends the administration of secale, vaginal douches and waiting for spontaneous expulsion. The latter may take place in a certain proportion of cases; still, so long as the bulk of the membranes are in the uterus, there is danger of hemorrhage, Sappremia, or Septicemia, possibilities we must always avoid. If, on the other hand, only a small portion be retained, we are justified in awaiting spontaneous expulsion, interfering alone when alterations in the lochia demand. If any doubt exists as to a portion being retained, never make an intra-uterine examination; await developments and watch the case for indications for a digital exploration. In some cases we can say absolutely, a part of the chorion failed to come away. This does not demand intra-uterine manipulation. Experiments have shown that if the ripe chorion be placed in a flask of water and held at about 37° c. in about fourteen days it will be broken down into small flakes. In such cases, then, the chorion will disintegrate without local pathologic changes and be discharged in an increased lochial secretion.

Complete retention of placenta and secundines may take place by means of a spastic contraction in the uterus below the placental bulk at a point corresponding to Bandl's ring. This condition is comparatively rare. It is caused by irritation to the lower uterine segment by

1. Traction on cord to deliver placenta.
2. Intra-uterine manipulation to free placenta.
3. Unjustifiable attempts to express placenta hastily and prematurely.
4. Ahlfeld experienced it as caused by pressure of the after-coming head on a comparatively narrow cervical canal.

The diagnosis is made by the presence of the signs of placental separation with failure to express the same. Examination reveals the "hour glass" contraction. The therapy consists in waiting until the spastic contracture relaxes. This can be aided by the use of sedatives, such as the Bromides, Chloral, Morphia, etc. In some cases Narcosis is demanded.

Another deviation from the normal process must be considered. In the absence of the normal tonic contractions, either before the placenta is expelled or directly afterwards, the uterus relaxes, allowing hemorrhage of a more or less severe

type. This atonic state may have its etiology in a number of factors: overstretching of uterus from hydramnios or multiple pregnancy; maternal exhaustion in delayed labor; adhesions of uterus to abdominal wall or pelvic organs; retained portions of placenta and membranes; *too rapid delivery of after-birth; too early expression by Credé method.* (Ahlfeld). Where the atony occurs before delivery of placenta, its spontaneous expulsion is an impossibility and its presence in the uterus a menace to the life of the woman. The only therapy is immediate evacuation and the securing of uterine contractions.

Relaxation of uterus following the completion of the third stage makes us suspect the retention of portions of after-birth. Prophylaxis consists in a thorough examination of expelled mass, as before stated, and if portions are missing, the institution of the treatment already given. Where the uterus is absolutely empty, cases of true atony, then, ergot subcutaneously, massage, hot vaginal douches, intra-uterine irrigations will secure firm contraction of uterus and check the bleeding. The massage must be persistent, for hours, if necessary. The hand upon the fundus is the surest guide to determine the true state of the uterus. Tonicity once obtained, may be held by the use of a tight binder, which will make firm pressure upon the fundus, one or more towels folded and placed beneath binder and directly over the fundus makes a good adjuvant. Secondary atony must be borne in mind—the case kept under close observation.

Various cardiac lesions, arterio-sclerosis, hemophilia, are complications, which may predispose to uterine atony and demand their special treatments.

In conclusion, I wish to mention the following salient points:

1. Immediately upon conclusion of the third stage, a hot, vaginal douche is to be recommended. The medication of the douche may vary to suit the preference of the attendant. This has among its advantages the removal of possible foci of infection introduced during the conduct of the labor; the removal of blood clots in the vagina; hemostasis to various points of abrasion. *Unless the strictest antisepsis can be observed in giving this douche, it is better that it be avoided.*

2. Cervical lacerations should be immediately repaired *only* when hemorrhage demands.

3. Perineal lacerations should be immediately repaired. It is not always essential to await the expulsion of the placenta

before placing the sutures. Strassman, Keller, Schauta, Chrobak, of the German School, will suture the lacerations without waiting for the placenta to be expelled. In the Vienna clinics I have seen numerous cases repaired immediately, the subsequent delivery of the after-birth having no effect upon the integrity of the sutures.

4. Immediate and routine examination, post-partum, to ascertain the condition of the lower birth canal is a superfluous and unnecessary interference, with attending dangers to a normal puerperium.

5. Ergot should be administered only upon indications, as above noted. Ergot should not be injected into the arms. Dr. Korndorfer, Jr., has seen several cases of marked paralysis of the upper extremities following the injections of ergot in this locality. The wall of the lower abdomen and buttocks are the locations of election.

6. Do not consider the management of the third stage at an end, and labor terminated, with the expulsion of placenta and secundines. The condition of the uterus following the delivery of these structures must be carefully noted and watched, and labor is to be declared at an end, that is, the obstetrician is justified in leaving his case, only after sufficient time has elapsed to advise him that immediate accidents are not forthcoming and are practically impossible.

THE PRESENT STATUS OF X-RAY TREATMENT.—Some men who have attained prominence in their profession have written on this subject with authority, while their technique has been extremely at fault. It is important to remember that we are not dealing with a single ray but very many rays. These rays vary inversely as the square of the distance. Also different rays vary in penetration. The placing of "interposition absorbent screens," the intensity of the ray, the length of exposure, and frequency of treatment are all of the greatest importance.

With all these variable factors (all of which can be varied by a skilful operator) the individual case is to be treated. Holtznecht, Savaraud and Kienbock abroad, Dr. F. H. Williams (Boston) and others in this country have done some excellent work along these lines. There is much more to X-ray treatment than a machine, tube and current. It is unsafe to draw conclusions as to the value of this treatment from reports of men who have failed to carry out the same degree of accuracy as in the dose of a drug or any other therapeutic agent. We must learn to distinguish between the extravagant claims of the charlatan and the conservative report of the trained and careful investigator.—W. B. J. *Medical Review of Reviews*, August 25, 1906.

**"THE THERAPEUTIC VALUE OF HOMŒOPATHIC REMEDIES TO THE
OBSTETRICIAN."**

BY

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(Read before the Homœopathic Medical Society of the State of Pennsylvania.)

IN the whole realm of medicine there is probably nothing which will make or mar the reputation of the general practitioner in a community more quickly than his success or failure in the management of obstetrical cases.

This being true, it behooves us to study carefully all the resources through which this desirable end may be obtained.

It is quite probable that if pregnant women knew, and would observe even the most elementary hygienic laws, there would be but little need of the watchful care and attention of the physician during the pregnant and puerperal states.

The truth of this statement is borne out by the fact that the human organism in its normal, as well as in its pathological state, is not only a *laboratory*, but a *receptacle* for *poisons*.

That the human race is not entirely annihilated is due to the fact that the organism possesses many resources which enables it to throw off these toxic substances into special reservoirs, as it were, and thus partially escapes the intoxications which constantly threaten life. When, however, through ignorance or neglect of hygienic laws, on the part of the patient, these poisons are not entirely eliminated, the blood and tissues of the entire system become surcharged with them, and we have the condition of *auto-intoxication*. This condition is probably responsible for the great majority of disorders incident to the pregnant and puerperal woman; at any rate, some of the most serious of these disorders are undoubtedly due to this cause.

What, then, shall be the guide in the treatment of these conditions?

It is not possible in the present allotment of time to present the various forms of treatment in a thorough manner, but recognizing the growing tendency to Therapeutic Nihilism in this, one of the most important branches of the physicians' work, we take this occasion to present one phase of treatment in these conditions, viz.:

**"THE THERAPEUTIC VALUE OF HOMŒOPATHIC REMEDIES TO
THE OBSTETRICIAN."**

That there should be any doubt of this is rather astonishing, especially to graduates of Homœopathic Colleges, but it is true that we often fail to recognize the vast treasures at our command in treating the pathological states so frequently met with by the Obstetrician.

From a practical standpoint we may ask, In what conditions and from what remedies may the Obstetrician expect results?

It seems to me that the answer to this question depends entirely on the physician, and his ability to recognize what is curable in disease, and what is curable in the patient; in other words, he must know the limitations of the law of cure. Neglect to mix our prescriptions, "with brains, sir," will bring failure as a natural result. For instance, who of you have not seen the vomiting of pregnancy ameliorated and cured by such remedies as Cuprum-ars., Veratrum-alb., Sepia, Tabacum, Colchicum, Symphoricarpus, and others, when selected according to the law of similars? But who of you have not also seen failures from these same drugs, and many others, no matter how carefully selected when there was some unrecognized mechanical irritation, as, for example, a malposition of the womb, or an eroded cervix?

My object in calling attention to these limitations in the sphere of action of the homœopathic remedy is not to see into how small a circle the law of Similia can be placed, but to show that by close and accurate observation this circle may be so enlarged that its circumference may be commensurate with the most advanced thought and scientific discoveries not only of the present, but of future years.

That the homœopathic remedy will shorten labor, and render it less painful, is a matter of common observation; nor is it less true that it will render the puerperal state more free from complications. As a type of remedy useful in these conditions, I will select *Caulophyllum*, or Squaw-root. Although it is one of the newer remedies used by homœopathic physicians, we must not forget that many years ago it was used by the Indians in almost the identical conditions for which it is now used. They administered the drug during the last months of pregnancy, believing that it would render labor more easy and free from complications.

When a pregnant woman is *very nervous* or *hysterical*, and suffers from *irregular, spasmodic* pains, flying here and there through the body, sometimes in the groins, or in the bladder,

or into the lower extremities (like Puls.), and these pains are very severe, in fact, almost unbearable, and yet there is no apparent result from them, Caulophyllum will most certainly correct these conditions; and under these same conditions, a rigid os will quickly relax, and labor pains will become more orderly.

It is a wonderful remedy in *atony* of the uterus with hæmorrhage, or when the woman is greatly exhausted, and labor pains cease. It is also very useful in *delayed involution* of the uterus, and is probably one of our best remedies for the prevention of premature labor, or irregular after pains. We thus see the strongly-marked *spasmodic* tendencies of this drug, and the rheumatic symptoms are also prominent. A symptom which is quite marked in nervous women, and in those suffering with some form of womb or ovarian trouble, is a sensation of *internal trembling*.

Caulophyllum has this symptom quite prominently, and future observation may prove it to be characteristic. The face of the Caulophyllum patient is frequently covered with "moth-spots" like Sepia. In other discomforts of pregnancy I will say that Actæa Racemosa is one of the very best remedies for the *lumbago* of pregnant women.

If you will give Belladonna, Bryonia or Phytolacca, according to their various indications, you will have but few cases of Mastitis.

But some one will say, Why do you not touch upon the more serious disorders? Where does the homœopathic remedy stand in the treatment of *puerperal eclampsia*, or *puerperal septicæmia*?

I will say right here, and without fear of successful contradiction, that if the pregnant woman be placed on the homœopathic remedy for a period of at least six weeks previous of the expected labor, *she will never get puerperal convulsions*.

Of course, dietetic and hygienic errors must be corrected as far as possible, but many times these measures will fail unless supported by the proper remedy. When, however, as it often happens, the physician does not see the patient until she is in convulsions, it is enough to make the stoutest heart quail, for both patient and physician are handicapped, and he is a wise man indeed who will recognize where dynamic drug action ends, and physiological drug action begins; for the system of the patient is overwhelmed by an irritant poison, and

it must be gotten rid of just as surely and quickly as we would rid the organism of any other irritant poison.

That the homœopathic remedy does assist the organism in getting rid of the poison I do not doubt, but that is no reason why we should neglect any of the valuable adjuvants at our command, for this disease is not usually so tractable that we can afford to neglect anything that will tend to save a human life.

Cuprum-arsenicosum probably stands at the head of remedies in this affection, at least in my experience, but Stramonium, Hyoscyamus, Jaborandi, and Veratum Viride ought always be thought of.

Gelsemium, Cicuta and other remedies may be indicated, but time and space prevent me from giving their indications.

In *puerperal septicæmia* the homœopathic remedy has won some of its greatest laurels. It is my firm belief that ordinary cleanliness (such as flushing out the uterine cavity and vagina with normal salt solution), combined with the internal administration of the homœopathic remedy, will be all sufficient to cure the great majority of all cases. The principal remedies in this condition are: Arsenicum album, Echinacea, Carbo-veg., Lachesis, Sulphur and Pyrogen. Aconite, Belladonna, Bryonia, etc., are not deep enough in their action for a truly septic state, so we only lose time by waiting for their action. There is one drug which apparently leads all others in septic states, especially puerperal sepsis, and that drug is Pyrogen.

Words fail to express the confidence with which I use this drug. Some of its symptoms as brought out in the proving are these: The patient complains of great aching in the bones as if they would break, and the patient feels as if she were bruised or pounded. With this condition there is great restlessness and anxiety of mind, the patient must move constantly on account of a great soreness. The bed feels hard and she must move and is generally *relieved by motion*. Then, too, there is great coldness and chilliness, usually at night, followed by very high fever, and a profuse sweat, which soaks everything—nightgown, bed clothes in fact everything touched by the patient, but this does not relieve any of the symptoms, nor reduce the temperature. Notwithstanding this high temperature, the pulse is but slightly accelerated. Now this is one of the great characteristics of Pyrogen—*lack of relationship between the temperature and the pulse rate*. There may be

either rapid pulse rate and low temperature or vice versa—you can readily see how closely the symptoms correspond to septic conditions.

We may say then that Pyrogen has the *soreness* of Arnica, the *restlessness* of Rhus-tox., the *aching* of Eupatorium, and the *mental anxiety* of Arsenic. No other single remedy has all of these characteristics combined, hence you see the value of this drug.

In conclusion I will say that I have tried to give *types* of remedies as well as of disease. Many more remedies might have been named, and their special indications pointed out, and many ailments common to pregnant and puerperal women might have been discussed, but time forbids.

The successful Obstetrician will be he who looks with unbiased mind upon the various resources at his command, and uses them intelligently. I can truthfully say, however, that when the homœopathic remedy has been carefully selected and prescribed within its limitations, I have never yet seen better results obtained from any other form of treatment.

THE YELLOW FEVER PROBLEM.

BY

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(Read before the American Institute of Homœopathy.)

IN speaking of the Yellow Fever problem, we do so as of one already solved, merely needing the vigorous application of methods discovered, tried and proved.

Even though the search for the germ or toxine of Yellow Fever has baffled all investigators up to the present time, the transmission of this mysterious and formerly dreaded disease has been positively traced to the mosquito, and of the hundreds of species classified by Mr. F. V. Theobald from the collection in the British Museum this deadly quality is confined to probably only one of the culicidæ.

This discovery, made by Dr. Carlos Finley, verified by the observations and experiments of the Sanitary Departments of Havana, Cuba; this verification, still further proved by

the splendid campaign of 1905 in New Orleans, La., makes the question of the control of Yellow Fever and even its obliteration in the Western Hemisphere, depend upon the thoroughness of the work of the authorities in whose hands the measures of prevention are placed.

Yellow Fever has now been demonstrated so conclusively to be a non-contagious and easily prevented disease that its spread to epidemic proportions would convict the community in which its introduction occurred of the grossest criminal negligence.

Before this new knowledge, the senseless panic and barbarous shotgun quarantines that heretofore have prevailed at the mere mention of the name "Yellow Fever" must disappear forever. Without touching upon the ancient history of Yellow Fever, its probable cause, of which nothing definite is known, its progress in the Western Hemisphere, where it has followed the lines of travel and commerce, I will merely endeavor to give a synopsis of its experimental and sanitary history dating from the discovery of Dr. Charles Finley.

Havana, Cuba, was until recently the only epidemic focus of Yellow Fever on or near the Western Continent (although some observers contend that Vera Cruz should be placed in the same category), and the reasons are obvious. It lies in a latitude in which frost never occurs; it is the principal port of entry for Cuba, receiving an annual influx of 4,000 to 40,000 non-immune Spaniards annually; its sanitary conditions were the worst on the earth, innumerable rain barrels, stagnant water, its gutters choked or conspicuous by their absence, the land-locked harbor a cesspool, the streets the dumping ground for offal of all kinds, all formed an ideal spot from which to propagate not only Yellow Fever, but any and all communicable diseases in their most virulent type.

Of course, I refer to conditions prior to American occupancy and control; all this has been changed, and Havana is now as clean as any city on the Continent, and cleaner than many. While there were periods in Havana when there were very few cases, as far back as the records go, from which any reliable statistics can be obtained, not a month has passed without a death from Yellow Fever, and there probably never was a day in which there was not a case of the disease until American occupancy. Other cities, towns and hamlets in the tropics possibly offer just as favorable sanitary and climatic

conditions for the propagation of Yellow Fever, but being of lesser commercial importance their non-immune population either dies or become immune, thus for long periods they remain free from the disease, until a fresh population of non-immunes and re-introduction of the fever from an infected point starts a new outbreak.

Such were the conditions in the tropics, when Drs. Gorgas, Reed, Guiteras, Agramonte, Lazear and others began their experimental work in Cuba, pursuing their investigations particularly along the line of blood culture in efforts to isolate the bacillus icteroides. Their efforts were unsuccessful, although some of those observers in previous individual research had claimed success in the isolation of this bacillus, their experiments, however, not being free from the possibility of error. At any rate, when completely baffled in working along these lines, they gave thought to the brilliant work of Ross and the Italian observers in connection with the theory of the transmission of malaria by the mosquito, and this naturally led up to the somewhat discredited theory advanced by Dr. Carlos Finley, of Havana, and published in the *Anales de la Real Academia* in 1881, and further elaborated in many later papers by the same author, in which he claimed that Yellow Fever was transmitted by the mosquito, and by a special variety of mosquitoes, then identified as the *Culex Fasciatus*, since reclassified and now generally known as the *stegomyia facia* and more recently renamed by the U. S. Agricultural Department *stegomyia calopus*.

Now followed the series of experiments covering a period of about two years (1900-1901), in which every effort was made to convey the disease to non-immune volunteers by fomites. The subjects were placed in close, illy ventilated rooms at a tropical temperature, screened, in this instance to keep out mosquitoes, and where were unpacked several large cases filled with sheets, blankets, pillow slips and clothing contaminated by contact with cases of Yellow Fever, many of these articles being purposely soiled with urine, fecal matter, black vomit and blood. These pieces were unpacked, handled, shaken and hung about the room, the beds being made up with this bedding, and the body clothing being worn by the subjects.

In these rooms beds and garments, offensive as they were, the plucky non-immune volunteers slept for twenty nights, in

no instance developing Yellow Fever, although fresh subjects were used in the many repetitions of the experiment to avoid the possibility of encountering those who might possess an unusual resistance to contagious or infectious diseases.

While I promised not to touch upon the ancient history of Yellow Fever, I cannot refrain in this connection from quoting from an "Essay on the Disease Called Yellow Fever in 1806, by Edward Nathaniel Bancroft, M. D., F. R. C. P." Dr. Bancroft says: "I can safely aver that several thousand cases of this disease fell under my observation in the West Indies, and that I did not find the least appearance of a contagious quality in any of them.

If the disease were contagious the fact must have been indisputably demonstrated more than ten thousand times, considering the multitudes who have been victims to it, and there would long since have been no more doubt on the subject than there now is in the contagious nature of Small Pox and Measles. The uniformity of nature and the necessary connection between cause and effect will not allow us to believe in the fortuitous occurrence of a few rare instances of contagion from Yellow Fever, in opposition to the immense mass of facts by which that disease has been proved destitute of any such quality, and the probabilities will always be a million times greater that these supposed rare instances here originated in ignorance, error, prejudice or falsehood, than that effects so monstrous should ever have really occurred." So we note that keen observers even over a hundred years ago strongly doubted the possibility of contagion. The inability to infect with fomites was further demonstrated by the constant presence of non-immune nurses in the emergency hospital in New Orleans last year, not one of whom contracted the disease.

Following this practical demonstration of the impossibility of conveying Yellow Fever by fomites, came the inoculation by infected mosquitoes, in this instance the openings being screened to keep the mosquitoes in, the room now being kept in as perfect sanitary condition as in the cleanest hospital ward, with abundant sunlight and air, sterilized bedding and body clothing, etc.

Here the non-immune subjects were bitten by infected *stegomyias* and in almost every instance where the proper period of incubation in the mosquito had been allowed, Yellow Fever

developed in a minimum period of forty-one hours, and a maximum of five days, seventeen hours. It was during these experiments that the lamented Dr. Lazear, while collecting blood from Yellow Fever patients in Las Animas Hospital, allowed a mosquito which had settled on his hand to remain until it had appeased its hunger; five days after the bite he had a chill, went through a typical case of Yellow Fever and died on the seventh day of the disease. Here, then, we had the positive proof that Yellow Fever could be transmitted by mosquitoes under certain definite conditions, and the negative proof or control test that it could not be conveyed by fomites.

We had the positive and almost infallible methods of prevention when the fever appeared in New Orleans in 1905, but the application of those methods at that time required herculean efforts before the final splendid results were attained.

The following conditions obtained:

A city of 333,000 inhabitants, covering an area of 196 $\frac{1}{4}$ square miles, in which resided from 150,000 to 200,000 non-immunes.

Only a small percentage of the physicians, to say nothing of the laity, who knew of or believed in the mosquito theory.

Sixty to seventy thousand open over-ground cisterns, many wells and other water receptacles, each one an ideal breeding place for the stegomyia. No adequate laws or available funds to begin war on the mosquito.

In a section of the old Spanish and French city, composed of two, three and four-story rookeries inhabited by a colony of Italians, unable to speak our language, one hundred or more cases of Yellow Fever were discovered. The first move by the health authorities was promptly followed by a stampede, patients were hidden in garrets and outhouses or taken out of a sick bed, dressed and spirited away, with the result that fifteen or twenty days after the discovery hundreds of foci of infection were established in all parts of the city and neighboring towns.

Imagine these conditions under the old regime, the result would have been an epidemic that would have been terrorizing in its magnitude, appalling in its mortality, and a blow to the commerce of the South, worse at this time than that which followed the epidemics of '53, '67 and '78.

Starting then with one hundred or more cases of fever, one hundred or more foci of infection, millions of omnipresent

stegomyias, and you can imagine the task that lay before the people of New Orleans, who, filled with their old time prejudices, had to be taught entirely new methods of prevention. However, the emergency was nobly met. Those who had the gift of language became the educators, and day by day, and night after night, the platform and stump were occupied by orators preaching the new order of things, and what must be done to be saved from death and disaster. Funds were secured, first by private subscription, later by special appropriation; the city was sub-divided into sanitary sections by wards, cisterns were oiled and temporarily screened with cheese cloth, gutters and pools were drained, oiled or salted, every case reported, whether genuine or suspicious, was isolated and screened, the houses occupied by cases as well as adjoining houses were fumigated with sulphur, to destroy, not infection, as in the past, but the infected mosquito, and striking was the result of this vigorous campaign when compared with previous outbreaks; within three weeks the backbone of the epidemic was broken and it was held well in check from this time to its close, despite the concealed foci constantly coming to light.

In 1878, starting about the same time of year with the first death on the same date, its progress was steadily onward, new cases and deaths increasing with almost mathematical precision, until on September 11th, the highest daily death list of 90 was reached, while on the same date in 1905 no death occurred. The decline from this date in 1878 was very gradual until frost appeared, while in 1905 no frost was needed to end the outbreak. Much was said about possible recrudescence of the fever this year, as the past winter was mild, frost appearing two or three times and then only in exposed locations, and there was some fear that infected hibernating mosquitoes would give rise to an outbreak of at least a few cases. These fears proved unfounded. From the end of the epidemic to the present time many cases of fever of the bilious remittent type of beginning typhoid, of malarial intermittent and even of pneumonia that gave one or more symptoms that might possibly appear in incipient Yellow Fever were investigated, all proving to be other than Yellow Fever when sufficiently developed, thus largely eliminating the fears of recrudescence in a section where the disease is not endemic, but always imported.

A slight element of doubt has been cast upon these conclusions by the development of a case in New Iberia, La., on August 19th of this year, as up to the present its importation has not been traced.

A word regarding how the work was done and to whom belongs the credit, much having been said and written about our surrender to the Public Health and Marine Hospital Service. The gentlemen representing this service, be it said to their credit, did excellent if sometimes unnecessarily brutal work, and did not claim more than a continuance of the methods already inaugurated by the local health officers and the citizens' sanitary organization. The supposition that they were backed by Federal authority, combined with the moral effect of khaki uniforms, lent to their presence more persuasive weight with those who felt panicky or rebelled against what they deemed interference with individual rights than would have been possible at that time under the State or municipal authority. This seeking of Federal aid for fear of a repetition of the '67 and '78 disasters I believe to be sincerely regretted by a majority of the people of Louisiana at this time, there having been no real necessity for the call, and particularly, as it led to a further request at the Immigration and Quarantine Convention held at Chattanooga, Tenn., that the Government take over the whole system of maritime quarantine, this being effected later by act of Congress. Thus we have through hasty and ill-advised action surrendered our police powers over the coast with its excellent quarantine system, devised, designed and perfected by Louisiana sanitarians and which had proved an effective protection for a period of nineteen years, even without the recently acquired knowledge of the mosquito method of transmission. Armed with this new knowledge, the sanitarians who have repeatedly observed and studied the disease in all its phases, are certainly superior to the constantly changing and inexperienced young men who go to make up the rank and file of the Marine Hospital Service, and whose military restrictions necessarily limit their experience to very few diseases.

I am glad to say that the surrender cannot be laid at the door of the medical profession, but to the political and mercantile interests which became hysterical over possible financial loss. The history of the recent epidemic of Yellow Fever would be incomplete without touching upon arsenization, pro-

phylaxis or immunization, as it was called by the disciple of Dr. Juana Pinto De Rego Cezar, of Brazil. The advance agent for this gentleman for weeks announced in the public press his coming as a savior of our people, ready to immolate himself on the altar of his theory of arsenization. Incidentally he was willing to sacrifice a few others who had consented to undergo the test. Ignoring the Hahnemann Medical Association of Louisiana, and the members of his own school of medicine, he went to the camp of the enemy, proffering himself and theory to the local Allopathic Association, by which he was promptly and properly turned down. He and his friends next inaugurated a campaign of speech-making, elaborating his theory and denouncing the medical trusts; he also appealed for individual physicians of repute and prominent laymen to supply the infected mosquitoes and supervise the experiment, and finally, when turned down on all sides and silenced by the chief of the Marine Hospital Service and the press as becoming a dangerous element, in that his followers refused to take the proper precautions of screening and oiling, he made application to the Hahnemann Medical Association, unofficially, however, and through a physician who for ethical reasons is not a member of said association. Though the courtesy of a called meeting was granted, it is almost superfluous to add that his request was refused.

This ended arsenization in New Orleans, and the sale of arsenic tablets (which had assumed enormous proportions) dropped at once to the vanishing point. However, the Doctor furnished us with some little entertainment; many pounds of arsenic were hastily worked up into 2 X tablets, druggists made a little money when business was very dull, the Doctor was dined and housed free of charge, had a pleasant free trip to and from New Orleans, gained a little ephemeral notoriety, and finally folded his tent and hied himself back to the Northwest or somewhere else where they have no Yellow Fever and probably don't know anything about it. In my personal practice about an even 50 per cent. of the cases, mild and severe, had been arsenized to the supposed point of immunization, and I could detect not one iota of difference in their cases from those not so protected.

With our present knowledge of the subject, we can then accept the following conclusions as fairly trustworthy and accurate:

The mosquito *Stegomyia Callopus* is the intermediate host for the germ or toxine of Yellow Fever.

Yellow Fever is transmitted to the non-immune by means of the bite of the mosquito, which has previously fed on the blood of those sick with this disease during the first three or four days of illness. A period of approximately twelve days or more after contamination is required before the mosquito is capable of transmitting the infection.

Yellow Fever can be experimentally produced by the subcutaneous injection of blood taken from the general circulation during the first and second days of this disease.

Yellow Fever is not conveyed by fomites; therefore, house disinfection of clothing, bedding or merchandise, supposedly contaminated by contact with those sick of the disease, is unnecessary. A house may be said to be infected with Yellow Fever only when there are present within its walls contaminated mosquitoes.

The spread of Yellow Fever can be effectually controlled by measures directed to the destruction of mosquitoes and the protection of the sick against their bites; although the mode of propagation of Yellow Fever has now been definitely determined, the specific cause of this disease remains undiscovered.

Inhibiting the propagation of the *Stegomyia Callopus* is best attained in cities and towns by subsurface water supplies, sewerage and drainage, or, where the use of tanks, cisterns and wells are unavoidable, by the screening of all such receptacles with copper or bronze wire screening of no larger than 18x18 mesh.

Arsenic in infinitesimal or in physiological doses does not immunize.

CEREBRAL COMPLICATIONS SECONDARY TO NASAL DISEASE. Robert H. Craig (*Montreal Medical Journal*, August, 1906) urges the advisability of examining the nose and nasopharynx in all cases in which meningeal inflammation is suspected; in all cases of headache, particularly where the cause is obscure; in all cases of dizziness, whether or not associated with aural disease, examination of the nares should never be neglected; the necessity of exact clinical and anatomico-pathological observations is pointed out in order to demonstrate meningeal inflammation as secondary to inflammation of the nose, nasopharynx, and pharynx.

EDITORIAL

THE RELATION OF THE PATHOLOGIST TO THERAPEUTICS.

IN an address recently delivered before the students at Guy's Hospital, Dr. T. Clifford Allbutt, Regius Professor of Medicine at the University of Cambridge, made the following remarks:

"Our debt to the morbid anatomists is so profound that in our gratitude we are forgetting that the pathologist is not a clinical physician; indeed, that so long as he is denied the right of access to living patients in the wards he is becoming more and more a man in a balloon. His laboratory is full of things no doubt, and hitherto he has dwelt soundly in things; but chiefly in dead things, not in things at work, yet our only real things are processes. Yet the pathologist has been largely concerned in undermining our clinical concepts; and so valuable a service has he done us in compelling us to occupy ourselves with things rather than words that we are gratefully disposed to believe that he can do no wrong. Hence, without protest, we have allowed him to relabel some of our things with his labels; often to our advantage, but at least sometimes to our error. For instance, the pathologist has seduced us into allowing him to use the label of arterio-sclerosis as the name of a disease. Now, if for the physician a disease is a series of symptoms recurring with such uniformity that we think it convenient to distinguish it with a name, arterio-sclerosis is no such a series, it is not a series of symptoms at all; it is a result, a statical result of foregone symptoms, probably of more than one series, and, if so, probably a compound name even in pathology.

"The physician who recognizes the imperative duty in dwelling in things ought to guard himself from being supposed to mean only things that stand still, his sphere is on the contrary with things in motion; he is a master of dynamics."

It seems fully time that some one should call the attention of the medical profession to the fact that it is both impractical and unscientific to base a system of therapeutics upon the find-

ings of morbid anatomy. Important as the work of investigators in these lines has been to modern medicine, it must be remembered that the specimens which they study are, generally speaking, results of morbid processes and not the disordered processes themselves. As Allbutt says, the practical physician has to deal with things in motion, with living forces. While the morbid anatomist, therefore, is mainly busied with the ultimate results of disordered functions and processes, the clinician is concerned with the origin and *modus operandi* of these morbid processes. Prophylactic and curative methods of treatment must of necessity be based upon our knowledge of the primary cause of the disease, not on its results, and must aim to restore to a normal condition those perverted forces and functions of the living body, which, if uninterrupted in their action, will result in alterations in anatomical structure and ultimately perhaps in the death of the individual.

The homœopathic school has always recognized the importance of directing our therapeutic measures toward the regulation of the vital forces of the body and of aiding these forces to act in a normal manner. Physicians of the old school, on the other hand, have followed the morbid anatomist into the dead room and into the laboratory, and have become so absorbed in dead things that they are dangerously near forgetting the living. The great dynamic forces of the body, the harmonious action of which regulate the functions of the various organs and tissues of the living organism, and whose perversion is capable of setting up an infinite variety of organic and functional derangements, they have almost entirely disregarded. And not only have they paid little heed to the vital forces of the body, but they have also disregarded the dynamic power of drugs to alter these forces. Consequently, their drug therapeutics is limited to agents whose action is largely mechanical in character. As examples of this we have the use of salines and other laxatives in febrile affections or the use of morphine to relieve pain. In each of these instances, it will be observed, no attempt is made to administer agents which have a specific relation to the primary morbid condition, but an attempt is made merely to relieve a symptom in one case and in the other to stimulate the action of some organ of the body upon the hypothesis that by increasing its activity we may indirectly cure the primary disorder.

The truth of the matter, and it is a truth that physicians are

loth to learn, is that the morbid anatomist is not a physician, and while his work is a very essential and very practical part of medical science, we might as well expect to learn therapeutics from a pharmacist or a chemist. Hahnemann laid stress on the fact that there is an important distinction between the medical sciences and the science of medicine. The adaptation of all scientific knowledge for the purpose of healing the sick and of relieving the suffering is the high and true aim of the practitioner of the healing art. Where the work of the morbid anatomist, of the bacteriologist, of the chemist or of the pharmacist ends, the work of the physician begins. It is he who must cull out from the great mass of accumulated knowledge of all times and of all sciences, those facts and principles which may be utilized in combatting sickness and death. This work, which is the masterpiece of the whole structure, cannot be carried on by the anatomist or the pathologist in their laboratories, nor by the chemist or pharmacist in their work-rooms, but must be wrought out with industry and patience by the practical physician at the bedside. When the medical profession, as a whole, more clearly appreciates these facts, there will be less tendency to abandon in a moment therapeutic agents which have stood the test of time and experience because, forsooth, some investigator has found that the same agent failed to prevent the growth of colonies of micro-organisms on a culture medium. Nor, on the other hand, will we be so ready to snatch up new measures whose sole recommendation is some hypothetical proposition of laboratory origin, such as the lithia fad in the treatment of irregular gout, which had as its basis the fact that lithia salts are capable of dissolving uric acid in a test tube. Their action on uric acid excretion in the living body, however, was proven to be of a very different character.

THE STATE LABORATORY OF THE PENNSYLVANIA DEPARTMENT OF HEALTH.

THE establishment of a State laboratory by the Pennsylvania Department of Health for the purpose of conducting scientific examinations and tests gratuitously for the physicians of the State, is a move which cannot fail to receive the sanction and praise of every progressive physician. Hereto-

fore such facilities for diagnosis have not been available except in certain of the larger municipalities. The Department of Health has secured the proper laboratory space through the courtesy of the University of Pennsylvania, and a staff of experts in clinical methods of examination have been secured, whose services are offered to the members of the medical profession of the State outside of municipalities having laboratories for the same purpose. The department has also prepared outfits for forwarding specimens of blood, sputum, etc., which will be forwarded to physicians upon request. In addition to the ordinary examination of the urine, blood, sputum, etc., the department has provided for the examination of milk, water, butter, etc. The gratuitous offer of such facilities on the part of the State to physicians will not only prove a saving to many individual citizens, but will also be a great stimulus to more thorough and accurate diagnosis on the part of medical practitioners.

AN EARLY SIGN OF AORTIC ANEURYSM. Osler states that pain is one of the earliest and most constant symptoms of aortic aneurysm. It was the first and most severe symptom in about half of the author's cases. It is possible that it may be absent, though there may be dyspnoea, cough, and cyanosis, and though the sac may perforate the wall-chest or erode the spine. The most common situation for the pain is in the region of the heart itself, radiating to the neck, the shoulder and back, and down the left arm or both arms. In some cases the abdominal pain is severe. Several distinct varieties of pain may be recognized in this disease: 1. Attacks of true angina, having paroxysms of pain of maximum intensity, with radiation to the arm. 2. Sharp neuralgic pain, due to the pressure on the nerves, perhaps extending along the course of the nerves, and associated with herpes when the descending thoracic aorta is implicated. It is similar in character to that which is caused by the pressure of pelvic tumors and by diseases of the vertebræ, and it may be paroxysmal in character. 3. Pain, of a dull, boring character, which is present when the chest wall or the spine is eroded by the aneurysmal sac. This is the form of aneurysmal pain which is most enduring and most severe. It is due to tension and stretching of fibrous and bony structures, rather than to pressure upon nerve cords. 4. Pain referred to the nerves of the arms or the skin in the precordial region, or to the pectoral or sternomastoid muscles.—*Medical Chronicle*.

GLEANINGS

ALCOHOL AND COFFEE AS ACTING UPON HEART DISEASE AND NERVOUS AFFECTIONS. Stoll. On the basis of his extensive experience as a heart specialist, the author reaches the following conclusions: Alcohol weakens the heart, by dilating the organ and diminishing its motor power. It induces nervous weakness by undernutrition of the central organs, of the nervous system, and of the abdominal organs. Coffee weakens the heart for the reason that caffeine exerts a degenerating influence upon the heart muscle. In the course of years, it leads to over-exertion and fatigue of the heart. With special reference to the combined action of alcohol and coffee, the author points out that the daily consumer of alcohol and coffee first weakens and paralyzes his heart power with alcohol by dilating and thinning out the heart muscle, and then compels it by means of coffee to work to the limit of its capacity, under these weakened functional conditions. The two agents together accomplish a supplementary process of destruction which gradually and systematically undermines the normal condition of the organ. Abstinence is just as advisable in regard to coffee (and tea) as in regard to alcohol. The caffeine-containing beverages should be more universally replaced by malted drinks and harmless herb infusions.—*Medical Review of Reviews.*

A SIMPLE MEANS OF RELIEVING THE EARACHE OF ACUTE OTITIS MEDIA. In inflammation of the middle ear, previous to the time when paracentesis of the membrana tympani is required or before spontaneous rupture affords relief by permitting free vent to the discharge the patient frequently demands immediate relief from pain. The ordinary local applications of cocaine, or phenol, combined with glycerin, are only partially successful. Neumann (*St. Petersburger medizinische Wochenschrift*, April 7) has found a much more effective means of attaining the desired result. It consists in introducing into the external auditory canal compresses of cotton moistened with ordinary dilute lead water, which are also applied to the concha and its vicinity. This solution is made extemporaneously by adding water to Goulard's extract, forming *eau blanche*. This solution is heated to the boiling point, and a small piece of absorbent cotton, rolled into the shape of a cone about an inch long, is dipped into it, and then introduced into the auditory canal. The concavities of the external ear are next to be filled with small compresses, which are also moistened with lead water and applied as hot as the patient can bear it. Finally, the entire ear and surrounding parts are covered with three compresses, dipped into the same solution, but from which the excess of moisture has been removed by expression. One of them is placed in front of the ear, the other in the space behind the ear, and the third above the preceding two. The

relief afforded by this is so great that the patient is enabled to await with tranquility the time for paracentesis or the spontaneous opening of the drum.—*Medical Review of Reviews*.

PULMONARY TUBERCULOSIS IN ITS RELATION TO OBSTETRICS. Formerly it was thought that pregnancy exerted a favorable influence upon tuberculous processes, and later, in the not remote past, that its influence was at least not harmful; but with a closer study of the clinical pathology of tuberculosis, following the correct understanding of its ætiology, etc., the profession has reached a realization of the baneful influence of gestation upon the tuberculous, in fact, the pendulum has swung so far in the opposite direction as to give rise to such assertions as that of Dubois, quoted by Osler, that "if a woman threatened with phthisis marries, she may bear the first accouchement well; the second with difficulty; the third never." In justice to some of the older observers, it must be said, that throughout the nineteenth century there, now and then, appeared in the literature a paper expressing views not unlike those held to-day.

CONCLUSIONS.

1. Active pulmonary tuberculosis and pregnancy constitute a dangerous complication.
2. Pregnancy exerts an unfavorable influence on pulmonary tuberculosis both immediately and remotely during the puerperium.
3. Measures should be taken to prevent the complication in women who are subjects of active tuberculosis. These measures may include the avoidance of marriage and the prevention of conception.
4. If the principle involved in the question of interrupting pregnancy is right, there are, occasionally, indications in the cases under consideration. Artificial sterilization is of doubtful utility.
5. Obstetric tuberculosis could be best treated in special institutions, for which a field exists.—Frank H. Washburn, M. D., *Amer. Med.*, June, 1906.

CASTS IN THE URINE, THEIR ORIGIN AND SIGNIFICANCE. Dr. Louis M. Warfield, after reviewing the history of casts, their origin and the findings in various nephritic conditions, makes the following suggestions in regard to their significance; that the epithelial cast, being the easiest formed, may be found in large numbers as a result of a simple "catarrhal condition" of the epithelium. They may occur in large numbers for a day or two and never be found again. Found alone, they are of no practical significance, provided that the occurrence is transient and that the patient's vascular system shows no evidence of disease. Coarsely granular casts mean degeneration of the kidney cells, not changes in the epithelium. These casts usually mean some acute disease process in the kidney parenchyma. They are rarely found in the subacute and chronic processes, except the parenchymatous variety.

The finely granular cast and the hyaline on the other hand indicate a slow irritation long continued, a subacute or chronic process.

Waxy casts are an indication of considerable damage to the kidney as a rule, while blood and pus casts are interpreted as evidences of severe acute disease.

He emphasizes the importance of not relying upon one examination, and asserts that absolutely no opinion can be formed from the examination, microscopically and chemically, of one specimen of urine. It is readily conceivable that in a kidney, the seat of a slow chronic process, casts may be few in the urine and may escape the most careful search for a number of days. Then, following some change in circulatory conditions, or some slight irritant, large numbers will be found. Frequent examinations, therefore, are necessary in many cases.

The following conclusions are drawn:

1. The epithelial, granular and hyaline casts have a common origin from the epithelial cells of the convoluted tubules by a degeneration and metamorphosis of the cells.

2. Casts alone or casts and albumin give no definite data as to the anatomical kidney condition. They may be found in greatest numbers in non-nephritic conditions and, *vice versa*, in the severest grades of nephritis there may be few or none.

3. Casts alone have no diagnostic or prognostic value, except after frequent examinations, and then only after a careful physical examination.

4. Epithelial, blood and pus casts are more common than is generally supposed. They may occur in a great variety of conditions and do not merit the significance usually given them.

5. The discovery of hyaline casts on repeated examination means a sub-acute or chronic kidney lesion. Their number is not of such importance as the length of time during which they occur.—Dr. Louis M. Warfield, *Medical Review*.

HOMATROPINE POISONING.—The patient, aged 22, the wife of a physician, came to the office, accompanied by her husband, for examination of her eyes, as she had been suffering severely and frequently with headache. The usual method was used—one drop of a 2 per cent. solution of cocain, followed after an interval of two minutes by a drop of a 2 per cent. solution of homatropin bromid, another instillation fifteen minutes later, the patient being directed to keep her eyes closed for several minutes after each instillation. Two instillations were made in the right and three in the left eye, five drops of homatropin being used. The solution was made two days before and had been used with the usual result.

When leaving the office her face was very flushed, but thinking she was unusually agitated, paid no attention to it, however, that was the first symptom of a general intoxication which proved to be quite serious. Within a short time she became very excited and nauseated, vomiting clear mucous and had violent headache. An $\frac{1}{8}$ grain morphia hypodermic afforded little relief. For several hours hot and cold cloths alternately were applied to her head, which seemed to relieve her. She slept for a short time, waking up slightly irrational and was again treated with hot cloths for nearly two hours. She seemed relieved and was quiet for several hours, when her breathing became so labored, her husband called another physician, and for two hours both worked with her, producing artificial respiration before she was able to breath naturally. Her mind was blank for twelve or fourteen hours. Retention of urine lasted two days, but bowels moved easily with magnesia citrate.

The thyroid gland was enlarged for a few days, pain about the heart was felt even at rest, any excitement would run her pulse up to 120 to 140 beats per minute.

The consulting physician says he was called about 6 A. M., and found the patient in a condition of almost profound syncope, pulse 150, weak and fluttering, respiration five per minute, all physical findings were negative, no heart lesion could be detected, the pupils were greatly dilated. Strychnia and nitro-glycerine were given, hot cloths over the cardiac region and artificial respiration for two hours, when the patient responded and rallied.—F. C. Hotz, M. D., Chicago. *Ophthalmic Record*.

WILLIAM SPENCER, M. D.

UNIOcular OPTIC NEURITIS AND RETENITIS.—The author remarks that the ophthalmologic text-books are comparatively silent on the subject of unilateral inflammation of the optic nerve and retina. After a number of references to the literature, which he says, is also comparatively scanty, he reports and analyzes 18 cases of his own observation within the past fifteen years. It is difficult, he finds, to fix any definite etiologic relations of the conditions. One-sided nephritis existed in one case, there was more or less arterio-sclerosis in five patients, two of whom also had albuminuria; valvular disease of the heart, together with previous cerebral hemorrhage, was found in one patient, while the remainder were classed as healthy and without cerebral, vascular or kidney disease. In a quarter century's experience in ophthalmic practice, he has never seen a case of optic neuritis that was not unioocular except when there was syphilis or brain tumor. He has never seen a case of neuroretinitis or retinitis that was not unioocular, except when there was double orbital cellulitis, Bright's disease, diabetes, mellitus or syphilis. He does not claim, however, that this must have been the experience also of others. The treatment he has employed has been almost invariably the administration of iodide of potassium, which he thinks has been of benefit. He thinks the condition more common than is indicated in ophthalmologic literature.—A. A. Hubbell, M. D. *Jour. A. M. A.*

WILLIAM SPENCER, M. D.

SYMPATHETIC OPHTHALMITIS AFTER OPHTHALMITIS.—The author reports a case of sympathetic ophthalmitis following panophthalmitis in a man aged 41 years. The patient was first seen in 1892, on account of loss of sight in both eyes. Examination showed incomplete cataract in the right eye and complete in the left eye. Six months previous to consulting the doctor the patient had been struck in the left eye by a nail. No scar or evidence of the previous inflammation was seen at the time of examination.

Believing that the right eye had not suffered from the injury, the patient was sent to a hospital and operated on for cataract in the usual manner. On the morning of the third day the patient was restless, with slight temperature, complaining of pain in the eye. On examination of the eye it was found soaked in pus. The eye was entirely lost from a suppurating process. A month later on returning to his office, there was an inflamed, somewhat atrophic globe in the left, while the sight of the right was diminished to perception of light, the ball tender and the pupil filled with

exudate, the iris adhered to the lens; in fact, a severe iridocyclitis of sympathetic type and origin.

Despite the removal of the offending eye, and most energetic local and constitutional treatment the patient went totally blind. The author gives an abstract of the only three other similar cases.

Ahlstrom reports one case and Schrimmer reports two. Leber, Deutchman, Gifford and others thought that the severe inflammation in panophthalmitis closed up the channels so that the germs could not pass through the lymph passages in the optic nerve to the other eye. Schermer and Ruge are of the opinion that it is possible for the germs to pass through at times.—H. V. Wurdemann, M. D. *Ophthalmic Record*.

WILLIAM SPENCER, M. D.

CONTACT KERATITIS AFTER CATARACT EXTRACTION.—Bruns, under the above title, reports two very interesting cases of central keratitis following cataract extraction. Each case developed a central keratitis in a few days after extraction. The wounds in each case not having closed, permitted the remnants of the capsule to lie against the posterior surface of the cornea, thus acting as a foreign body, setting up an irritation and producing a central opacity. These cases are extremely interesting inasmuch as they are the first reported cases of a similar accident, and such a central opacity following contract extraction would cause one a good deal of anxiety if he did not know the cause.—*Annals of Ophthalmol.*

WILLIAM SPENCER, M. D.

EMBOLISM FOLLOWING ABDOMINAL SECTION. Krusen (Philadelphia) in writing on this dangerous and not altogether rare accident, reports five cases, four of which terminated fatally. The accident occurred six hours, five days, thirteen days, and fourteen days after operation respectively, and in the fifth case, which recovered, on the twenty-first day.

The treatment in the latter case included the use of atropia, strychnia, digitalin; heat externally; oxygen. The patient's condition was critical for two days, the pulse ranging from 130 to 150; but she improved gradually and left the hospital on the thirty-ninth day.

In a series of over 7,000 cases reported, this accident was observed 48 times. Dearborn's review shows it is possible that many cases of pluri-sy, pneumonia and pulmonary abscess following operation are due to emboli. Any sudden increase in pulse rate during convalescence, the temperature remaining about normal, should remind one of the possibility of thrombosis.—*Amer. Jr. Obs. Vol* 53, 478.

THEODORE J. GRAMM, M. D.

PELVIC CONTRACTION. In an article on the present status of pelvimetry, Ehrenfest formulates an observation which every physician can and should remember, and one which doubtless has been confirmed by every obstetrician of experience, namely: whenever we are able to reach the promontory of the sacrum in the presence of a normal rigid perineum we are justified in assuming that the pelvis is contracted in its antero-posterior diameters.—*Amer. Jr. Obs. Vol* 53, 477.

THEODORE J. GRAMM, M. D.

THE CAUSES AND SIGNIFICANCE OF HEART AFFECTIONS IN KIDNEY DISEASES. From a study of this subject Passler (Dresden) comes to the following conclusions:

1. The cardiac hypertrophy in nephritis is the consequence of the kidney disease.

2. As a result of the kidney lesion, it is probable that there first arises an increased irritability of the vaso-motor apparatus, with arterial spasm as a consequence and also an increased resistance in the circulation.

3. The hypertrophy of the left auricle and of the right heart in nephritis is the result of the insufficiency of the left ventricle.

4. The polyuria in some kidney diseases, especially contracted kidney, depends most likely upon an increased "filtration pressure" in the loops of the glomeruli; we must assume that the blood pressure in the renal capillaries is not abnormally increased even with high arterial pressure, since the increase of pressure is expended in overcoming the increased resistance in the small arteries.

5. The therapeutic measures for retaining the compensation, and those used in the disturbed compensation in contracted kidney, must especially take into account decreasing the arterial resistance, besides strengthening the heart muscle.—*Samml. klin. Vorträge*, No. 408.

THEODORE J. GRAMM, M. D.

PARTURITION WITH FOUL SMELLING AMNIOTIC FLUID. Lehmann has published some observations concerning 59 cases occurring among 9,500 labors, of which 29 were primiparæ and 30 multiparæ. All of the cases excepting one which was a case of premature delivery, had been subjected to internal examination. In several instances the amniotic fluid was foul smelling at the time of rupture of the membranes, but it was not possible to determine whether there had not also been a previous rupture of the membranes high up. The average duration of labor after rupture of the membrane was 41 hours. Thirty cases had fever during the labor and during the puerperium; 12 cases had fever only in the puerperium; 8 cases only during labor; in 3 cases there was no fever either during labor or subsequently; of the remaining 6 cases 3 died of peritonitis, 2 of pyemia, and one of atonic post partum hemorrhage. The mortality as just stated, comprised 6 cases of the 59 observed.

Respecting the etiology, the author says that the amniotic fluid tends to become foul in those cases where a disproportionately long time elapses between the rupture of the membranes and the termination of labor, during which time an infection of the uterine contents takes place, although the manner of this infection is not always clear.

As regards the prognosis for the mother this condition is always to be regarded as a serious complication, and all the more so if any operative interference is demanded. The prognosis for the child is less seriously influenced. It is a debated question whether in all such cases the labor should be immediately terminated. From the experience of this author it is not best to do so in every instance, but only where the fever is rising rapidly, in eclampsia, and in absolute impossibility of unaided delivery. The patient should be treated conservatively in order not to produce lesions in the lower birth canal which could become infected; the uterine

cavity itself is not necessarily involved in the infection. For this reason also intrauterine douches are not called for, though the lower canal may be treated by antiseptic irrigation.—*Arch. f. Gyn.* Vol. 78, 198.

THEODORE J. GRAMM, M. D.

WHAT INFORMATION CAN WE OBTAIN FROM SYMPTOMATOLOGY IN GYNECOLOGY CASES is a question to which Harrison (New York) gives an instructive reply. He begins by stating that relaxing or separating the connection between specialism and general medicine leads to onesidedness, and this danger becomes the more imminent the earlier the young physician narrows his domain of activity and assumes the garb of a specialist. Litzmann has said "He then easily sinks down to a mere technician, who in spite of conspicuous performances in his sphere, loses more and more the claim to the name of physician." It is absolutely necessary to maintain this connection in order to successfully practice gynecology.

A few of the symptoms which the author more fully discusses may be briefly stated. Menorrhagia and metrorrhagia usually accompany hyperplastic disease of the uterine mucous membrane, and are present in benign and malignant tumors seated in the mucous membrane. This is especially true of the fibromata which often produce severe forms of anæmia. The waxy, yellowish hue of countenance from the profuse hemorrhages of the ulcerative stage of carcinoma is highly distinctive. There may be excessive hemorrhage from stasis and strangulation of the mesometrium in deviations of the uterus, in prolapsus, retroflexions, and inversion. In most acute inflammations of the genitalia, as in gonorrhœa of the uterus and adnexa and in septic conditions, the loss of blood is not significant.

Under normal conditions menstruation is not accompanied by a noteworthy elevation of temperature. When, however, an acute inflammatory process affects the genitalia, accompanied by rise of temperature, the latter will be increased during menstruation; and when the process has so far run its course that the temperature is normal, fever may still be observed at the time of menstruation. The usual causes of amenorrhœa are reviewed. An important fact is that amenorrhœa is often an early symptom of tuberculosis.

Of sterility the author says it has been conclusively shown that in one-third of sterile marriages the fault is with the male, and far and above every other cause for this is gonorrhœa, which has occasioned epididymitis. If the sterility is attributable to the woman the lesion is usually either in the ovaries or will consist in obstacles along the genital canal. Ovulation is impaired in defective development of the ovaries, in the presence of tumors, and in chronic inflammation, especially when it affects the corticle layer. The latter may be induced by gonorrhœa. Gonorrhœal salpingitis is especially detrimental to the possibility of conception, aside from the consecutive inflammations in the neighborhood of the tubes. Occlusion of the fimbriated extremity is a common result of gonorrhœa.

In reference to hysteria the author well says that every neurosis which may be designated as hysterical is not to be referred to a pelvic disease. In practice it is found that a course of treatment directed to the pelvic organs in many cases removes the hysterical manifestations, while in chronic cases such treatment is not always successful.—*Amer. Jr. Obs.* Vol. 53, 501.

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY JOHN HUTCHINSON, M. D.

"UP-TO-DATE."—It is frequently stated that if Hahnemann lived to-day he would have done thus and so, adopted such and such measures, and kept "up with modern progress." If anyone can demonstrate what would have happened had what did happen not have happened, he can answer for Hahnemann's actions in twentieth century surroundings. But, as he thundered in vigorous and blunt German against the mixed messes of drugs and the huge doses given, it is at least allowable to infer that he would not have changed in this respect.—*Homœopathic Recorder*.

[We hardly believe that "Modern Progress in Medicine" would (as such) startle Hahnemann were he alive to-day. He got used to that sort of thing and had brains enough to accept it for exactly what it was worth.]

AN EFFECTIVE WAY OF DEALING WITH FILTHY RESTAURANTS.—The Kansas City (Mo.) Board of Health, when it finds a restaurant in an untidy condition, causes to be posted in a prominent place a yellow card bearing this legend:

CONDEMNED.

The kitchen in this restaurant is conducted in a dirty
and unsanitary manner. Food prepared in this condition is
dangerous to health.

Board of Health.

This card can be removed only upon the authority of the board.

—*The Pacific Coast Journal of Homœopathy*.

CHLOROFORM anesthesia which for long years was supposed to be practically free from late effects is presenting a constantly increasing number of *bona fide* cases of late fatalities. These usually assume the general symptomatology of acute atrophy of the liver, and are not amenable to the usual methods of treatment.—*Clinical Reporter*.

CALCAREA CARBONICA (Calcareo Ostrearum). By Herbert T. Webster, M. D., Oakland, Cal. . . . Calcareo ostrearum, or, as it is commonly referred to by homœopaths, "calcareo carbonica," is as distinctly animal in its origin as apis or tela.

It is not unusual for writers outside the homœopathic school to confound this remedy with what they commonly know as carbonate of lime. This is not remarkable, seeing as the name would naturally lead to such

a conclusion; but we might as well expect to derive the same therapeutic effect from the ashes of burnt lobelia that we do from the fresh plant, as to expect similar properties from homœopathic *calcareo carbonica* and ordinary carbonate of lime. *Calcareo ostrearum* is prepared from the middle layer of the oyster shell in its fresh state, and is an animalized preparation, representing properties due to organic growth, which would be destroyed if subjected to incineration. The soft white substance lying between the external and internal hard layers of the shell is triturated and prepared in dilutions and triturations for medicinal use, and is commonly labeled as *calcareo carbonica*, though it is evident that it represents something quite different from ordinary carbonate of lime. . . .

We can afford to give Hahnemann and his followers much credit for our knowledge of this remedy and of the uses they have made of it. They have afforded us an excellent initiation into its present use, and we may, by our own investigations, be able to add in the future to its value as a specific medicine. Provings do not afford us all that may be gained from a medicine. We seldom use a specific which has been tested by proving long before we find ourselves adding something to it. This one ought to be joined to our list. There is no reason why it should not. Because there exists a priority of use is no reason it should not be ours. This objection obtains, really, with the majority of our specifics; but that is no reason why they are not just what we want. Why not accumulate a few more? We possess none more positive, more needful, or more specific, than this. . . . —*Eclectic Medical Journal*.

A NOTE ON THE ESSENTIALS OF A HOMŒOPATHIC MATERIA MEDICA.

By John Henry Clarke, M. D.— Just to illustrate my meaning I will give two cases, which I hope will not weary you. Some time ago, after a quite insignificant attack of influenza, I was left with a sensitiveness of the teeth which gave me a good deal of annoyance, but was not bad enough to make me take any trouble to cure it, or to pay my dentist a visit. As far as I knew my teeth were all either sound or properly filled.

In homœopathy we may do much by generalizing practice, and this kind of homœopathy is possible from such works as the *Pharmacodynamics*. But this is the wrong end at which to begin—homœopaths must first individualise and generalise after. And further when generalising fails we must always have individualising to fall back upon.

To return to my toothache. After the thing had been going on for three weeks with such generalising treatment as a few doses of *Kreasote*, *Mercurius*, and *Spigelia* could supply, without the smallest apparent success, the trouble began to grow rather worse and disturb my nights. One night I noticed that though the pain was worse on the left side, I could not sleep on my right side, as I generally do, because that made the pain much worse.

The thing was now bad enough to be worth looking up, and moreover I had a fresh characteristic aggravation to go upon. Hahnemann's tip to go first for the most peculiar symptom is worth all the generalising ever invented. Here I had "Pain < lying on the painless side" as the most peculiar symptom; and this was the first to be matched.

I now turned to Father Hering's *Toothache Repertory*, which I have adopted from his *Domestic Homœopathic Physician*—a work which every student should know by heart—in the sixth edition of my *Prescriber*, and I think improved upon, and there I found a number of remedies which have toothache < lying on the painless side, *Chamomilla* among the rest. Remedies having toothache on < left side *Chamomilla* and others. Toothache < at night, *Chamomilla*. I thus had three legs for my stool and was tolerably happy. I took a few globules of *Chamomilla* 200, and in two hours I was distinctly better; ate my next meal in comfort for the first time in three weeks, slept the next night on either side indifferently, and the following day was quite well. . . . —*Homœopathic World*.

A FEW COMPARISONS. By C. S. Middleton, M. D.—Belladonna undoubtedly has a more profound action upon the cerebrum and the meninges of the brain than either hyoscyamus or stramonium, producing great and serious pathologic states of that organ, accounting for the intense pains (frontal) and throbbing in the head, raging, violent delirium, convulsions and exceedingly high temperature.

Stramonium is a close second to bell. in the mental excitement and sensorial manifestations, apparently falling just short of inflammatory conditions, but still having very high fever, violent delirium, with fear, aggravated by bright light and difficulty in swallowing liquids, owing to constriction of the throat—while the difficulty in swallowing from belladonna poisoning is due to inflammation—the aggravation by bright and intensified light being sufficient to cause the patient to pass into convulsions, which is not the case in bell., where we have an increased irritation to a brain congested, or inflamed meninges. The incessant talking, rambling from one subject to another, without bearing any relation to each other, which we frequently meet in fevers and mental diseases, is a most marked indication for stramonium.

Hyoscyamus seems to occupy a middle ground between belladonna and stramonium—there being less indication of inflammation in the one instance, and in consequence less violent delirium; in fact, the latter is of the low, stupid form, frequently muttering, staring, asthenic character; in typhoid fever, picking at the bedclothes, and at imaginary objects in the air with other hallucinations and illusions, as to horrible images, animals, etc., which make hyoscyamus, as well as stram. a most excellent remedy in delirium tremens, but stram. will have constant wandering, talking—while the hyoscyamus case will be of a lower muttering type, with frightful hallucinations. All the various forms of mental aberrations in hyoscyamus, in fact, seem to point to irritation of certain sets of nerve centers, such as those causing the patient to revel in obscene thoughts, excitation of some spinal and muscular centers; therefore hyoscyamus becomes a most valuable remedy in bulbar paralysis and paralysis agitans, as well as for nervous conditions due to irritation of the sensory tract.

The selection of one of these drugs as indicated in a given case may be largely aided by a correct diagnosis, but after all, only a close differentiation of the symptoms can lead us to a certainty.—*Progress*.

AN EXPERIENCE WITH MERCURIUS CORROSIVUS. By W. S. Thompson, M. D., Augusta, Maine.—After studying and practicing medicine about seventeen years, an old school physician, somewhat younger than myself, rushed into my office and asked: "What do you homœopaths give for intense pain when, we of the old school, give opium or some of its preparations?" My answer was, "the homœopathic remedy." He replied, "What is it?" I told him that what I had been seventeen years learning, or trying to learn, I could not give to him in half an hour. A great many times we homœopaths have ransacked our therapeutic arsenal while asking the same question, "What is it?"

While I believe strongly in obtaining the totality of the symptoms of a given case, I just as thoroughly believe that the keynote, or notes, of a remedy blaze the path that leads to that totality. When I graduated in medicine, so much had been said by our different professors warning us not to fall into the dangerous habit of routinism, that my mind was firmly fixed against the custom or habit, but, in spite of careful individualization I found that certain seasons of the year required certain remedies time, and again, to cure their ills, and almost unconsciously I had fallen into the habit of first using some particular remedy for a particular disease or trouble.

Among some of the examples of my routinism is the use of that wonderful polychrest belladonna in affections of the bladder. In May, 1905, I was called to see a gentleman suffering with an inflammation of the bladder with the following symptoms: Frequent, painful urination, or attempts at urination, with tenesmus and straining; fever; flushed face and glassy eyes. The recurring attacks of straining were prolonged and continuous, and affected not alone the bladder but the rectum as well, causing extremely painful efforts of defecation. The first remedy given was belladonna 3x in water; a dose every hour. Enough relief followed to warrant a continuation of the remedy on the second visit of the first day. Remedy continued the second day. Hemorrhage occurring the third day, hamamelis 3x was exhibited with relief of that symptom. The fourth day presented the patient much worse, particularly as to the straining, the effects of which were simply horrible for me to watch, and seemingly not to be endured longer by the patient. The patient must be relieved in some way. Must I resort to opium? This was no abstractive but a concrete case of suffering for me to relieve.

Remembering the rectal straining of dysentery, which has been so often relieved by mercurius corrosivus, I resolved to try "it." Ten o'clock at night, and think of my disgust at finding the vial of merc. cor. not in the case I had at the time. I, therefore, made a hurried walk to the office and returned with the remedy, which gave almost instant relief, and the patient had a good night, as I found in the morning.

He made a complete recovery on mercurius corrosivus. Would my colleague have been ready to admit that merc. cor. in this case was "it?"—*The New England Medical Gazette.*

PTOMAINÉ POISONING. By Pauline H. Barton, M. D.—The term ptomaines is given to a large number of products generated in the decomposition of albuminous matter as the result of bacterial action. These

products differ greatly in character, some being very poisonous, while others may be entirely harmless. Ptomaines arise only in consequence of putrefactive changes in dead animal tissue, secretions or products. Some are present during one stage of the putrefactive process, others in another, but are generally manifest in the early stages, even before any organic changes can be detected. The most common sources of ptomaine poisoning are due to the decomposition of meat, fish and shell-fish, milk and its derivative products. In some cases heating destroys the ptomaines, in others it has no effect.

The symptoms of ptomaine poisoning are divided by Mann, an authority in that field, into two classes; First, those due to true infection, and second, those due to simple poisoning.

Cases due to true infection present the symptoms and follow the same course of an infectious disease, and often so closely simulate typhoid that its true nature is not suspected.

In cases due to simple poisoning there may or may not be a period of inoculation, characterized by languor, malaise, rigors, loss of appetite, nausea, vertigo, fainting and abdominal pains. More often, after from one to forty-eight hours, the symptoms appear suddenly and with great intensity, and are such as characterize a violent attack of gastro-enteritis,—nausea, vomiting, violent cramps and purging. The colicky pains vary some and are usually accompanied by cold sweat; the stools are dark and exceedingly offensive; there is profound prostration. The temperature rises, the pulse is accelerated, but in grave cases the former is sub-normal; choleric symptoms become more marked, there is collapse, and death may follow.

The treatment is the usual method of eliminating poisons by means of emetics, colon flushes and purgatives. The therapeutic indications are the same as in any gastro-intestinal inflammation. Arsenicum is the remedy par excellence in most cases of ptomaine poisoning, but bryonia, nuxvomica, and veratrum alb. should not be overlooked.

Long before much had been known about ptomaines, carbo veg. was advocated for ailments due to eating putrid meats, fish, rancid fats. Carbo veg. is, however, not adapted to the treatment of the majority of severe cases of ptomaine poisoning, though it may be of great service in the stage of collapse, and for subsequent disturbances during convalescence.—*Cleveland M. and S. Reporter*.

CAUSTICUM AND SEPIA—TWO CASES. G. E. Heath, M. D., Gardiner, Me.—In apology for the two cases about to be cited I would say that they do not properly belong to the section of eye, ear and throat. Until too late for withdrawal from the program the report was supposed to fall under the general head of clinical medicine.

CASE 1.—Causticum. While prescribing one evening for another member of the family my attention was called to the mother of the household, a woman of eighty years. She had for some weeks suffered from a cough, and was greatly annoyed by the involuntary discharge of urine after each attack of coughing, both night and day. She had looked upon it as a necessary, and, therefore incurable, evil, and expressed surprise that I should speak with confidence of a remedy that would correct the annoy-

ance. Further questioning brought out the following symptoms: Hoarseness, cough with inability to get low enough to raise the mucus, paralytic weakness of the legs, unsteady walking, worse mornings. Causticum 3x was given. Twenty-four hours later the urine was under control, and the enuresis never recurred. The cough and hoarseness were entirely relieved in a few days, and the causticum was continued for the general weakness. The patient is now in vigorous health.

Case 2.—*Sepia*. A patient who declared herself well in every particular, asked for relief from a single symptom, an intensely offensive odor of the urine. She described the urine as fetid, nauseating, usually normal in appearance, but sometimes with reddish, cloudy sediment. This symptom had been persistent for six months. The patient was a slight brunette, about forty years of age.

Sepia 12x effected a complete and rapid cure, and one year later the patient reported that there had never been the slightest recurrence of the annoying symptom.—*Hom. E., E. and Throat Jour.*

CAUSTICUM IN LARYNGITIS. Thomas L. Shearer, M. D., Baltimore, Md.—The patient was a lady, æt. 45 years; she had dark hair, was stout and of a highly strung nervous organization. She had from time to time suffered from attacks of acute laryngitis with more or less bronchitis, and always placed herself under old school treatment. The attacks lasted usually, in spite of local and general treatment for six weeks to two months. During one of these she applied to me for examination and treatment. The symptoms that she most clearly outlined were: A hard, dry cough, with rawness in the larynx and aphonia; the cough was worse in the early morning, and was greatly aggravated by her coming from the atmosphere of the street into the warmer temperature of the room. The cough was so severe that she was exhausted (at times) almost to the point of collapse, and frequently the coughing was accompanied by entire loss of control over her bladder and the annoying (involuntary) escape of urine. At night she was unable to get into an easy position, and complained of a feeling of faintness. From this group of symptoms I prescribed causticum 6x dilution, and she obtained entire relief in a few days. While *pulsatilla* has this loss of control of the urinary bladder with cough, it seemed to me that causticum was decidedly indicated in this particular case. The result certainly justified the choice.

C. G. FELLOWS: I am glad to hear that paper, because I have tried causticum many times without result. Some one told me to try kali causticum, which I did, and with results.

C. W. HUBBARD: When clearly indicated, I get good results, unquestionably, from causticum.—*Hom. E., E. and Throat Jour.*

THE AMERICAN SURGICAL TRADE ASSOCIATION announces that at a meeting held in Philadelphia, June, 1906, it was resolved that in order to secure uniformity, after January 1, 1907, the trade adopt the French scale for all catheters, bougies, and sounds. Physicians are requested after that date to use only the French scale in ordering such articles.

FOREIGN LITERATURE

CONDUCTED BY E. FORNIAS, M. D.

PEDIATRIC CONCLUSIONS AND PRECEPTS. (*Continued.*)

81. The nutrition of sick infants is an arduous problem. Firstly, they burn up their reserves of fat, then they sacrifice the albumin. They neglect the reserves of carbo-hydrates, which represented by the glycogen, are very scanty. The emaciation occurs early, the hypothermia late. Acetone and butyric acid, derived from the disintegration of fatty substances, appear in the urine. Heubner.

82. Nitrogenous suralimentation provokes digestive troubles, which hinder the young organism from obtaining proper nutrition. It is in fact one of the causes of gastro-enteritis. Legrand.

83. Suralimentation, with fat or carbo-hydrates, is also incompatible with healthy nutrition, for this is disturbed by the chemical composition of the milk, or by those digestive troubles due to the abuse of farinaceous. Legrand.

84. Quantitative suralimentation either causes severe digestive troubles, with wasting, or slight digestive disorders with obesity.

85. In infants affected with gastro-enteritis, there are nutritive disorders revealing an acid intoxication. The presence of a great quantity of ammonia in the urine, is due to the abundant formation of acids in the digestive canal at the expense of the fat of the milk. Czerny and Keller.

86. As to the treatment of acute diarrhœa. Put not your faith in drugs. The watchwords in the treatment of acute diarrhœa in an infant, must be two—one is starvation, the other is elimination. Hutchison.

87. You must starve the child because you do not wish to furnish any further pabulum for the growth of micro-organism; and milk in particular must be withheld, for there is reason to believe that milk in such cases is actually poisonous.

88. In a case of acute diarrhœa, whatever you do you must stop the milk, and with regard to elimination, your idea should be, in the first place, to remove so far as you can those organisms which are still growing in the alimentary canal, and, in the second place, to get rid of their poisons. Hutchison.

89. Infants only bear starvation well if you keep them warm, and at the same time supply them with plenty of liquid. Withhold all food for twenty-four hours if there is severe vomiting, and give sips of boiled water, or a weak decoction of barley water. Hutchison.

90. Or, if you want to make a pretence of giving some nourishment, give a weak veal broth or egg-white dissolved in water, one or two teaspoonfuls at a time. Even in that case, however, I think the benefit is

derived from the water. It is a matter of indifference whether you put anything in it or not. Still you may wish to defer to the wishes of the parent in the matter of appearing to give something nourishing. Hutchison.

91. If the case is doing well you can continue starvation for two or even three days. As the symptoms abate you may begin to give a little nourishment in the shape of whey, but the thing which you should give last, and be most careful about giving, is the casein of milk, because that is what does harm more than anything else. You may add raw egg-white to the whey, and continue this mixture until the motions are satisfactory. Hutchison.

92. With regard to elimination, if there is vomiting, begin by washing out the stomach by means of a small red rubber œsophageal tube. The method is simple and safe, and compared with a similar proceeding in adults, comparatively pleasant to the patient, for the œsophagus in a baby is bigger than one may think.

93. You will not find drugs of much assistance in acute vomiting, and in chronic vomiting, drugs must take quite a subsidiary place. It is only after you have corrected the feeding and washed out the stomach thoroughly that you should think of drugs at all.

94. If the diarrhœa be severe, and especially if there is reason to suppose that the large intestine is chiefly involved, wash out the colon also—that is to say, begin your treatment by washing out “at both ends.”

95. In washing out the bowel, I do not think it matters much what solution should be used. Warm saline solution is as good as anything else. It should be given through a douche-can or funnel. Care must be taken not to hold the can too high, it should not be raised more than 2 feet. Remember it is not difficult to rupture the colon in attempts to wash out the bowel. Hutchison.

96. I think in washing out the colon, it is best to have the child lying on his back, with the hips slightly raised, so that the fluid can gravitate down into the colon, using a small-bore soft œsophageal tube, just as for washing out the stomach.

97. The œsophageal tube should be introduced carefully, and you will find its introduction much more easy and satisfactory if you keep the fluid flowing all the time. The reason for this is, that the colon being only a potential cavity, and its walls more or less in opposition, the liquid as it runs in clears a way for the tube.

98. In washing out the colon, pass the tube up as high as you can—you cannot pass it too high. Irrigate the intestine thoroughly, until the washing comes away clear. By so doing you will wash away some at least of the organisms which are growing there, as well as a certain amount of the toxic products which these bacteria have been producing.

99. In all severe diarrhœas employ subcutaneous injections of fluid in order to favor elimination. In cases accompanied by collapse, especially in those in which the skin is inelastic, elimination is apt to be interfered with simply from the fall of blood pressure, and in such patients you have to make up the volume of fluid in the circulation as quickly as possible.

100. Give a subcutaneous injection of about 5 ounces of sterilized normal salt solution under the skin of the flank. It is very quickly absorbed,

raises the blood pressure, and helps to wash out poisons through the kidneys. The injection may be repeated every six hours if necessary.

101. As we cannot wash out the small intestines, where the micro-organisms are chiefly growing, in order to promote elimination there, you require to have recourse to drugs. Paradoxical though it may seem, you must treat diarrhœa, in its early stages at least, by purgatives. When these have acted you have done all you can to clear away the putrefactive material from the small bowel. Hutchison.

102. Egg-albumin and water is of great value in the treatment of certain cases of diarrhœa where a tendency to the decomposition of starch and fat exists. It is prepared in the following manner: The white of one egg is added to a tumblerful of cold water, and thoroughly stirred until it is broken up. A little sugar is added in order that the infant may take it more readily. Elder and Fowler.

103. For the alert clinician, insufficient nourishment cannot long remain undiscovered, and still the task of supplying proper food is sometimes very arduous. With the best knowledge of substitutes for the mother's milk, the necessary synthesis of cow's milk; its modifications, &c., are of no avail, and discouragement reaches its maximum when we find, that change of air, unskilled feeding, and meddling practices, do occasionally more for the child than our strict adherence to well-tested, scientific tables on percentages of proteins, fat and carbohydrates.

104. We are told excess of fat provokes regurgitations, vomiting and diarrhœa, with fat in the stools; excess of sugar may give rise to colic and green acid stools; casein in excess, causes colic, constipation, and white hard curds in the stools, &c., but we frequently see nurslings thrive well, when the necessary precautions to avoid these excesses have been neglected.

105. I have seen diluted condensed milk and combinations of milk with bean-puree, barley-water, and cream, do well in certain cases, while in others, they have been followed by rickets, scurvy, or dyspepsia. In Spain, children, after the first dentition is advanced, receive daily a crust of bread with olive oil and a little salt. Callejas.

106. In the natural state of things every woman is the source of nourishment for her own child, but you will not have been long in practice before you realize that under modern conditions it is the minority of women who can nurse, or do nurse, their own children. It seems to be part of the price which we pay for civilization. Hutchison.

107. If a woman is unable to nurse her own child, obviously the next best substitute is to get another woman to nurse it for her. But I do not think you will have occasion to employ a wet nurse often in practice.

108. What is to justify you in adopting artificial feeding in the case of a woman who has begun to nurse her own infant? I know only one condition on the part of the child that justifies premature weaning, and that is persistent loss of weight; but, of course, this only holds good in the absence of digestive disturbance. If you can avoid it, never wean a child in hot weather.

109. If a child is persistently losing weight when fed on the mother's breast, that is an indication, and an imperative one, for weaning and there is no other imperative indication that I know of.

110. Before you conclude that the breast milk is insufficient, make quite certain that you have corrected any digestive disturbance in the child; and you will find particularly that you have to correct, in breast-fed babies, constipation, just as you have to correct diarrhœa in bottle-fed babies.

111. In practice, cow's milk will always be your substitute for human milk. Many other kinds have been recommended, but the practical conveniences of cow's milk are so great that one rarely uses any other.

112. I cannot too strongly call attention to the fact, that it is the casein which is the source of difficulty in the artificial feeding of children with cow's milk.

113. There are well-known chemical reasons why the casein of cow's milk is less digestible than the casein of human milk; but whatever those reasons may be, it is a fact which you will meet in practice that you have difficulty in getting infants to digest cow's casein, and for that reason you must give the cow's milk in a diluted form.

114. It is best to begin first of all, with a dilution of half and half; that is to say, give as much cow's milk as water. If you like, you can use barley-water or lime-water as a diluent; these make it more easily digestible than plain water.

115. A half and half dilution makes the proportion of proteid, roughly speaking, correct, but the sugar and the fat are too poor, and you must therefore make up the deficiency by adding two teaspoonfuls of cream (about 45 per cent.) and two level teaspoonfuls of sugar to every 6 ounces of the mixture. That gives you a mixture which quantitatively is a fair approximation to mother's milk. Qualitatively, of course, it is not the same thing as human milk, and it never can be.

116. The milk should be neither boiled nor raw, but scalded. The drawback to boiling the milk is, that there is a very slight risk of producing scurvy by it. I think the advocates of boiling milk have exaggerated the dangers of bacterial infection.

117. In hot weather it is much more necessary to scald the milk, because thereby one diminishes the tendency to its going sour and causing diarrhœa.

118. The balance will show if a mixture of equal parts of milk and water is suitable. A healthy child should gain almost one ounce a day; he should gain six ounces a week. Obviously, one of two things will happen on this mixture: either the child goes on gaining weight, or he suffers from digestive disturbance, colic, possibly diarrhœa, possibly vomiting.

119. If the child does not gain weight, or if he suffers from digestive disturbance, we should remember the possibility, particularly if the child is very young that this mixture is too strong, and that it may be advisable to make it more dilute.

(To be continued.)

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